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**ABSTRACT**

This report, which identifies problems and needs of teacher education in Florida through 1978, is the product of a 3-year task force created to explore the educational manpower needs and to study the present potential capacity of the State University System for meeting these needs. Chapter 1, which discusses the broad context of the new technology and the teacher's changing role, outlines the State University System's mission to develop and disseminate teaching technology while maintaining quality control of training program. Chapter 2 surveys the supply of teachers, source of supply, comparison with national supply, continuing and inservice needs, and other facts relative to staffing of Florida's public schools from kindergarten through junior college. Chapter 3 surveys teacher preparation programs currently available or in planning stages in the various state certification categories in each of the seven state universities. Surveyed also for each university are instructional personnel and students, classroom and laboratory space, library space and resources, supplementary facilities and personnel, and resources needed. Chapter 4 presents a proposed model for the design and evaluation of teacher training programs and recommends a plan for establishing it through a state teacher education research and development program. Chapter 5 lists the specific recommendations identified as most urgent. Appendixes contain numerous supplementary data tables. (JS)

**ED034721**

**TEACHER EDUCATION IN FLORIDA**

**1968 - 1978**

**U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE  
OFFICE OF EDUCATION**

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**Report of the Role and Scope Task Force  
on  
Teacher Education**

This is the report of a study written to produce an internal planning document for the Chancellor's office. Persons who use the study as a reference should keep in mind that the recommendations in the study have not received official Board approval.

**State University System of Florida  
Office for Academic Affairs  
Tallahassee, Florida 32304  
September, 1969**

**SP003396**

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## FOREWORD

Upon the recommendation of the Deans of Education of the State Universities in the Spring of 1966, Vice Chancellor Allan Tucker authorized the formation of a Role and Scope Task Force on Teacher Education. At its first meeting in June 1966, the mission of the Task Force was presented to it by Dr. Tucker. He summarized the charge to the Task Force thusly:

- .... Recommend ways to improve teacher education.
- .... Suggest ways for establishing inter-university cooperation.
- .... Inventory what is being done in teacher education.
- .... Identify problems in teacher education.
- .... Indicate the direction teacher education should take over the next five years.

Each education dean was requested to appoint his representative to the Task Force. In addition to representatives of the colleges of education, the State Superintendent of Public Instruction was asked to name a representative of his office.

Dr. Sam H. Moorer was designated to represent the Office for Academic Affairs and to serve as Chairman of the Committee.

Those who served as official representatives on the Task Force were:

University of Florida

- Dr. Bert Sharp  
Dr. Emmett Williams

Florida State University

- Mr. Phillip Fordyce  
Dr. J. Stanley Marshall  
Dr. William Maloy

Florida A & M University

- Dr. Anne R. Gayles

University of South Florida

- Mr. Lee DuBois  
Dr. Charles Manker, Jr.

Florida Atlantic University

- Dr. James Bax  
Dr. Homer Howard  
Dr. William Stosberg

University of West Florida

- Dr. W. J. Woodham, Jr.  
Dr. Billy J. Williams

Florida Technological University

- Dr. C. C. Miller  
Dr. Robert Martin

State Department of Education

- Mr. William C. Golden  
Mr. Ray V. Pottorf  
Dr. K. Fred Daniel

Board of Regents Staff

- Dr. Sam H. Moorer  
Mr. John W. Sutton

A total of 17 meetings were held, 4 in 1966, 7 in 1967, and 6 in 1968.

During this time, members of the Task Force worked diligently and completed their assigned mission to the best of their ability.

A complete record of the activities of the Task Force may be found in the minutes of their 17 meetings. These minutes are on file in the Board of Regents Office for Academic Affairs.

This report, it will be noted, is concerned more with identifying problems and needs of teacher education in Florida than with a recital of past accomplishments. This is in keeping with the assigned mission of the Task Force.

Other than presenting an inventory of present programs in teacher education

and present productivity, the Task Force did not attempt to highlight the many solid accomplishments of the State University System in the field of teacher education. There are many evidences which might have been cited to support a claim of high quality teacher education in Florida. Members of the Task Force believe that, compared to the rest of the nation, the quality of teachers who receive their training in the state supported institutions of higher learning in Florida and in most of the non-public institutions, is indeed superior. Some would say that, when considered in relation to the resources which have been made available to it by the State of Florida and the relatively low status it has been accorded in the past, teacher education in the State University System has been exceedingly effective. Thousands of able, conscientious, and dedicated teachers in our schools who received their training in Florida will attest to this.

Yet the best teacher education programs anywhere are not nearly good enough for the last half of the twentieth century in America. After fifty years of relatively unproductive study of teaching, new approaches and new intellectual and technological tools for the study of teaching have made their appearance. Our teacher training institutions are ready and willing, but not yet able, to make fully effective uses of these approaches and tools. Reasons for their inability to do so should become clear in this report, along with recommendations of the Task Force for improving teacher education in Florida.

All members of the Role and Scope Task Force on Teacher Education made significant contributions to the work of the Task Force by participating in meetings, gathering data, writing sections of the report, and in reviewing and criticizing the several drafts of the manuscript. Each member of the Task Force did his homework well. Without many hours of labor at and between meetings, this report could never have been brought to its final state.

A special word of appreciation is due Dr. Fred Daniel who wrote Chapter I and to Dr. William Maloy who worked with Dr. Daniel on the model for designing and evaluating teacher training programs and wrote the material describing the model.

The projections of personnel needs and most of the other statistical data were produced by the Florida Department of Education under Dr. Daniel's direction.

Dr. Emerson G. Tully, Director of Education Research in the Office for Academic Affairs, Mr. David McOuat, Research Associate, and Mr. Robert Garrigues, former Research Assistant, were most helpful in compiling initial data for the Report of the New Supply of Instructional Personnel.

The Education Deans in the State University System recommended the formation of the Task Force, appointed representatives from the Schools and Colleges of Education, and were highly supportive from beginning to end.

Mr. John Sutton, Assistant to the Vice Chancellor for Academic Affairs, served as secretary to the Task Force at many of its meetings, reviewed each draft of the Report and made numerous helpful suggestions.

Dr. John Shadgett, former Assistant to the Coordinator of Teacher Education, headed the initial effort in gathering data for Chapter III and served as secretary for a number of Task Force meetings.

Dr. Glenn Goerke, Director of Academic Program Coordination in the Office for Academic Affairs, participated in several meetings of the Task Force and provided strong and continuous support.

Dr. Sam H. Moorer, Coordinator of Teacher Education, served as Chairman of the Task Force, wrote much of the material, edited the manuscript, and made arrangements for the consultant to meet with the Task Force and visit each of the university campuses.

Dr. Frank Dickey, Executive Director of the National Commission on Accrediting, served as consultant to the Task Force, visited each of the campuses to inspect facilities and to confer with key personnel, and submitted a most helpful statement which appears at the end of this Report.

Mrs. Audrey Graham, Secretary to the Coordinator of Teacher Education, typed numerous drafts of the Report and minutes of Task Force meetings. The final draft was typed by Marcella Jenkins and Mrs. Rose Hickey.

The contributions of each of those named above, plus staff members and secretaries in the Florida Department of Education and in the Colleges of Education, too numerous to be mentioned here, are acknowledged with deep appreciation.



---

Allan Tucker  
Vice Chancellor for Academic Affairs  
State University System

## INTRODUCTION

The State of Florida, like each of the other states, has accepted the responsibility for public education. The state constitution and the statutes provide for a uniform system of free public education. The successful operation of this system of public education is possible, however, only if a sizeable corps of competent and dedicated teachers is available for service. Consequently, an effective teacher education component is an essential element in any system of public education. If the state is to have quality schools, the state must provide quality teachers.

During the recent years, only two-fifths of Florida's new teachers have been graduates of Florida institutions. Many of these were not graduates of instructional programs explicitly designed for preparing quality teachers. Obviously, Florida has not in the past accepted the responsibility for preparing an adequate number of qualified teachers for staffing its public schools.

Furthermore, the Governor's Commission for Quality Education emphasized, and the enactments of the first 1968 Special Session of the Florida Legislature made it imperative, that educational goals be established and that careful and comprehensive plans be made for accomplishing those goals. In no area is the need for goals, plans, and fundamental decisions more critical than in the area of education manpower.

The deliberations of the Role and Scope Task Force on Teacher Education

have paralleled these developments. The mission of the Task Force has been to explore the educational manpower needs of Florida and to study the present potential capacity of the State University System for meeting these needs. The Task Force has assembled information which has not previously been available; information which will provide educational decision makers a more precise and comprehensive data base from which to establish goals and plans and to make fundamental decisions regarding personnel needs and faculty development programs.

The type of information provided in this report is essential if the State University System is to function as a total system. System-wide policy decisions must be made regarding the extent of the university system's commitment to the maintenance and improvement of the Florida public school system and regarding the scope of programs in each institution. Specifically, the State University System must define the nature and extent of its commitment for preparing quality teachers for Florida's schools and for providing continuing programs to up-grade these teachers.

**CHAPTER I**  
**PROVIDING QUALITY TEACHING**  
**FOR**  
**FLORIDA PUBLIC SCHOOLS**

## CHAPTER I

### PROVIDING QUALITY TEACHING FOR FLORIDA PUBLIC SCHOOLS

In studying the State University System's responsibility for teacher education, Task Force members have been seeking ways to insure that quality teaching will take place in Florida public schools. Task Force members have viewed teacher education in the broadest possible perspective. Their concern began with quality teacher training and went beyond to focus upon quality teaching. They have viewed teacher education as a broadly based system of activities designed to bring about quality teaching.

Research on teaching and learning is a fundamental element in a teacher education system. It is the mission of research to develop the technology of teaching. Such technology provides a basis for rational approach to teaching, as well as to teacher training. It clarifies the relationship between different types of teaching behaviors, different types of teaching materials, different types of pupils, and different types of results. It provides a sound theoretical basis for organizing educational programs for obtaining the desired educational results.

Dissemination is a second important element in a teacher education system. The research described above is of little value if provisions are not made for disseminating its results. A dissemination system must be provided so that those responsible for operating educational programs will have access to the most up-to-date technology. This technology comprises not only mechanical or electronic devices, but also patterns of teaching and administrative behavior which have been demonstrated to yield certain results under specified conditions.

The training of teachers and other educational personnel constitutes a third fundamental element in a teacher education system. A training program consists of three components. The first is a design or development component. This component produces methods, procedures and materials which will provide teaching candidates with the knowledge, attitudes and skills which research indicates they need. The second component consists of the actual teacher training operation. In this component, the training of teachers is carried out. The third component consists of evaluation or quality control. This component provides information as to the extent to which the objectives of the training program are being accomplished. This information is then used to modify the design of the training program. It is obvious that the three components of the teacher training program are not discrete. Many of the same personnel will be involved in all three. Once the program is implemented activities in all three components will be taking place simultaneously and continuously.

#### Going Beyond Technology

The above paragraphs describe a system of improving teaching based upon the development and application of better technology. However, in order for the State University System to carry out its responsibilities for intellectual leadership, it must go beyond technology. The most difficult questions being put to contemporary society are not questions which technology can answer. Many of these questions affect teaching. Some are questions which must be answered by teachers.

The State University System must make its best thinkers available to advise and assist those at the state and local levels who must make decisions regarding educational policy. Should the schools strive to instill in children a belief in the values and mores of their parents? Should the schools

emphasize vocational efficiency over artistic sensitivity? Should the schools establish standard achievement requirements for all students? These and many other such questions must be answered by state and local boards of education. The State University System must find ways of providing insight whereby those who answer these questions will be responding as statesmen.

Professional educators, also, must make decisions which go beyond technology. Local school officials must decide how much non-conformity they are willing to permit on the part of both teachers and students. They must decide how much available funds should be spent on musical instruments and how much on supplementary materials for teaching social studies. Teachers must decide when to strive for a thorough understanding of a limited amount of material and when to strive for a limited understanding of a great deal of material. Teachers must decide when it is more important to teach the skills of learning and when to teach a body of information. Teachers must decide the relative importance of a positive attitude toward a discipline as compared with the ability to achieve a high score on a given test in that discipline. In short, training programs for educational personnel must go beyond technology.

#### Making Quality Teaching Possible

The teacher of today has received more training, has better facilities, and has better teaching materials than had the teachers of any earlier period. In spite of this, the teacher's job has become more difficult. The schools -- through the teachers -- are expected to accomplish complex goals with virtually all persons in the school age population.

This has not always been the case. Formerly, the goals of education were not complex. Pupils were expected to read certain books, spell certain words,

perform certain arithmetic operations, and remember certain facts. Today there is too much to be learned for anyone to learn all of it. Furthermore, knowledge and skills learned today may not be useful tomorrow. Thus, educators are forced to select among many different educational goals, many of which are much more difficult to obtain than the goals of the past.

Moreover, teachers are expected to attain complex educational goals with all types of children. In years past it was not expected that every child should complete the basic school program. Those who lacked the interest or aptitude were expected to drop out. Today many concepts and skills which are deemed necessary for useful life must be obtained in school. The basic school program has been lengthened and every child is expected to complete this program. Children must not be permitted to fail.

The conditions described in the above paragraphs will undoubtedly continue and will probably become more pronounced. Public education will be expected to do more things for more people. And unless the technology of teaching becomes more highly developed, quality teaching for the majority of students will be virtually impossible.

It will be the technology of teaching which provides educators with information on the choices which are available. It will be the technology of teaching which provides teachers with insights into the probable results of selecting a particular alternative. It will be the technology of teaching which will provide teachers with an outline of procedures to follow in implementing their choices. Without such technology, teachers will be limited, students will be limited, and the effectiveness of public education will be limited.

### The Artistic Application of Technology

A more extensive application of technology to teaching will in no way negate the concept of teaching as art. Just as advances in technology have enhanced the art of clothing design, the art of photography, or the art of home-making, advances in technology will enhance the art of teaching.

A teacher practices his artistry when he selects the unique combination of teaching behaviors, teaching materials, and student activities to accomplish the desired educational objectives. Technology provides the teacher with a repertoire of teaching behaviors, with a repertoire of materials, with a repertoire of student activities, and with the insight into the probable results of each. The teacher then selects the appropriate combination of these teaching resources, much in the manner that an architect selects the appropriate combination of building resources. In either case, certain combinations under certain conditions will result in art.

### Changing the Role of the Teacher

If quality teaching is to be possible on a broad scale, the role of the teacher must change. The teacher must place major attention on applying technology in an artistic manner, rather than on developing the technology. It is no longer reasonable to place a limit upon the technology which a given teacher can apply. Forcing a teacher to use only the technology which he, himself, invents places upon him just such limitations. The manner in which the role of the teacher must change can be compared with the manner in which the role of the housewife has changed during recent decades.

The housewife once had few choices regarding clothing and food for her family. It could be said that the conditions of her environment actually dictated the nature of her family's food and clothing. While her job was physically quite different, intellectually it was very simple. She had few choices. Consequently,

she had few decisions to make.

Likewise, a teacher of a few decades ago had a job which was relatively simple intellectually. The curricula and methods of teaching were standardized. He had few choices to make.

Today, the intellectual burdens placed upon both the housewife and the teacher have become infinitely more complex. The environment of the housewife now presents her with a broad range of choices. While she no longer has to go through the physical routine of growing the vegetables or weaving the cloth, she must perform the intellectual task of selecting the most appropriate food and clothing for her family. If she selects wisely, making judicious use of prepackaged foods and clothes made of newly developed fabrics, her family will be far better clothed and nourished than the family of 50 years ago.

The teacher of today must also make decisions which are much more complex. He can no longer afford for his pupils not to learn merely because of limitations resulting from their aptitudes or attitudes. The fact that education objectives are more complex serves to compound the dilemma. Fortunately, like the housewife, the teacher has a much wider range of choices available. He may choose between several textbooks, among several strategies for teaching the material, and among several types of teaching aids.

In order for quality teaching to be possible on a wide-spread basis, the physical job of teaching must be made easier much in the same manner that the physical job of the housewife has been made easier. Teachers must have available technology which they can draw upon. This technology consists of a repertoire of behavior patterns which they have mastered, a repertoire of teaching aids, and a repertoire of pupil activities. The teacher should not be expected to spend a great deal of time making his own teaching aids. These

can be made much more effectively and economically by others. Just as families can be well fed without growing all their own food and can be well clothed without weaving the cloth, students can be well taught without requiring teachers to develop all of the teaching aids. Teachers should spend more time in selecting teaching aids and less time in constructing them.

Limitation Upon Quantitative Solutions to Problems of Quality

There is sometimes a tendency to attempt to improve quality solely through quantitative methods. In the case of teaching or related educational services this is represented by moves to reduce class sizes and to increase the number of supportive personnel while making only token attempts to develop and utilize better technology.

It will be seen that the present report gives a great deal of attention to quantitative dimensions of the problem. There are a number of statistics reported herein which provide information on the number of new personnel which will be needed to maintain present programs. Also, there are statistics reported which indicate the number of personnel needed to establish recommended programs. This report has been questioned by some because more emphasis is not placed upon the matter of training the number of personnel needed to establish recommended programs. The Task Force believes, however, that the State University System should not place a disproportionate amount of emphasis on quantitative solutions which assume a perpetuation of present school staffing patterns and a perpetuation of present teacher training patterns.

The major emphasis should be upon the development of teaching technology, the dissemination of this technology, and the incorporation of this technology into the teacher training curricula. At the same time, the Task Force advocates much greater attention to quality control within teacher training programs.

Efforts should be made to select for teacher training programs only those persons who are likely to go into teaching. Efforts should also be made to ascertain the extent to which teacher education graduates can apply in teaching the knowledge and skills which they learn in teacher training programs.

The development of teaching technology and the strengthening of standards in teacher training programs should increase the attractiveness of the teaching profession and be a significant factor in reducing attrition among teachers. This will go a long way toward reducing the quantitative problems in teaching--the teacher shortage-- and will also increase the quality.

The development of teaching technology will also lead to new ways of deploying educational personnel. It may be that greater increases in the quality of teaching will result from increasing the number of teacher aides or other supportive personnel than from increasing the number of teachers. It seems likely that professional personnel are now performing many duties which could be delegated. Currently, it is commonly felt that teachers should be available to supervise virtually all learning activities which take place in school. It is the feeling of some, however, that the professional task of the teacher is (a) to select the appropriate objectives, the appropriate strategies, the appropriate materials, and the appropriate evaluation techniques, and (b) to determine the extent to which objectives are accomplished. It is necessary for the professional teacher to assume the actual responsibility for monitoring pupil learning only when this duty requires professional skills or professional judgments. The further development of teaching technology will clarify the manner in which professional skills can be used most effectively.

In carrying out its mission in teacher education, the State University System must view teacher education in its broadest context. It must develop and disseminate teaching technology, as well as train teaching personnel. In sum, the mission of the State University System is to make quality teaching possible.

**CHAPTER II**  
**FLORIDA'S NEED FOR TEACHERS**

CHAPTER II  
FLORIDA'S NEED FOR TEACHERS

Supply of Teachers

Along with other fast growing states, Florida constantly faces the problem of enlarging and expanding public services and facilities of all kinds to meet the needs of its citizens. Keeping abreast of the growing population tide with adequate school buildings and teaching staff continues to challenge both state and local governmental units.

In Florida the number of professional educators (teachers, administrators, supervisors) employed in the public elementary and secondary schools in 1966-67 was 57,707, 92% greater than the number employed in 1956-57. Projections of personnel needed to maintain present programs in Florida public schools show that the number needed in 1976-77 will be 64,478 or 12% greater than the number employed in 1966-67.<sup>1</sup>

To the number needed to maintain present programs there must be added the number of additional personnel needed to staff public kindergartens and programs of special education which were authorized by the first 1968 Special Session of the Legislature. By adding these it has been determined that the number of personnel needed in Florida public schools in 1976-77 will be 73,134 or 28% greater than the number employed during 1966-67.

It should be noted that these projections include only maintenance of present programs and addition of newly authorized programs and do not take into account possible new programs which are needed and may be authorized during the next ten years.

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<sup>1</sup>See Appendix I, "Projections of Personnel Needed to Maintain Present Programs in Florida Public Schools 1969-78"

In view of the current emphasis on quality in public education, it should also be recognized that merely to maintain present programs leaves much to be desired.

Quality education assumes quality teachers. In 1966-67, approximately 14% of all employed instructional personnel had not completed requirements for full certification, and thus held sub-standard certificates. In this same year, 10% of the classes in Florida's public schools were taught by teachers who did not meet the required minimum subject-matter qualifications.

There is also a growing need for junior college teachers. During the next ten years it is expected that Florida's need for public junior college instructors and administrative personnel will increase from 3347 to 8350, a 249% gain.

#### Source of Supply

During the past ten years Florida teacher education institutions, both public and private, have produced approximately two-fifths of the new teachers employed each year. This has made it necessary for county school systems and the State Department of Education to mount an aggressive campaign to recruit educational personnel from other states.

In-state production of educational personnel is, however, increasing. If the growth of teacher productivity continues to increase at the same rate it has increased during the past few years, it is anticipated that within ten years Florida institutions can provide sufficient educational personnel to staff school programs of the types which are now operating in the state.

As the supply of new teachers increases, meeting Florida's teacher need from a quantitative standpoint, it becomes even more imperative to focus increased efforts on improving the quality of teacher preparation.

TABLE 1

A Comparison of the Number of Teachers Needed to Staff  
 Florida Schools with the Number of Teacher  
 Education Graduates Being  
 Produced in Florida

Year	Personnel Needed <sup>1</sup>		No. of Graduates From Florida Teacher Education Programs <sup>3</sup>	No. Needed Beyond Florida Supply
	Total	New <sup>2</sup>		
1966-67	57,348	11,530	4901 <sup>4</sup>	6629
1967-68	60,523	11,346	5944	5402
1968-69	63,675	12,186	6481	5705
1969-70	65,891	11,629		
1970-71	67,841	11,598		
1971-72	69,299	11,317		
1972-73	70,420	11,086		
1973-74	71,243	10,844		
1974-75	71,164	10,014		
1975-76	69,301	9,836		
1976-77	71,162	10,208		
1977-78	71,167	10,188		

<sup>1</sup> Based upon State Department of Education projections (See Appendix I). Also includes personnel needed for newly authorized kindergartens and exceptional child programs. (The Florida Legislature in its first 1968 Special Session authorized 661 new kindergarten units and 500 new exceptional child units for 1968-69. It also stipulated that the public schools shall provide kindergartens and exceptional child classes for all eligible children by 1973).

<sup>2</sup> Includes both additions and replacements.

<sup>3</sup> Includes both bachelors and masters degrees. Based upon reports submitted to the State Department of Education by teacher training institutions.

<sup>4</sup> Number of masters degrees is estimated.

### Comparison with National Supply

Each year the Research Division of the National Education Association publishes a report Teacher Supply and Demand in Public Schools. Data from this report were used in preparing Table 2 which compares the supply of teachers in Florida with the national supply.

This comparison indicates that the Florida supply of teachers is much less adequate than the supply nationwide. Whereas a critical shortage at the national level exists in two fields, elementary education and mathematics, there are critical shortages in Florida in seven fields: elementary education, library sciences, mathematics, women's physical education, physical and natural sciences, special education, and vocational-technical education. In only four fields: art, men's physical education, social studies, and guidance and counseling, is the supply adequate in terms of Florida's needs to maintain present programs. For quality programs in guidance based on a ratio of one guidance counselor for each 500 students at the elementary level and a ratio of one to 375 at the secondary level there would be a critical shortage of guidance personnel.

It should be emphasized that comparisons on Table 2 are calculated on number of teachers needed to maintain present programs, not quality programs as defined in recommendations of Florida School Accreditation Standards. It should also be kept in mind that Table 2 is based on the supply of teachers produced in Florida teacher training institutions.

If a determined effort were mounted to provide quality programs, the Florida shortages would be even more severe in the following fields: elementary education, kindergarten, English, mathematics, music, general sciences, biology, social studies, and special education.

TABLE 2

Comparison of Florida Supply of Teachers with National Supply

	<u>Florida</u>	<u>National</u>
Regular Instruction, Elementary	Critical shortage	Critical shortage
Agriculture	Shortage	Near balance
Art	Adequate	Adequate
Business Education	Shortage	Near balance
English	Shortage	Low supply
Foreign Language	Shortage	Near balance
Home Economics	Shortage	Near balance
Industrial Arts	Shortage	Low supply
Library Sciences	Critical shortage	Information not available
Mathematics	Critical shortage	Critical shortage
Music	Shortage	Near balance
Physical & Health Education		
Secondary (women)	Critical shortage	Low supply
Secondary (men)	Adequate	Adequate
Biology	Shortage	Shortage
Other Sciences	Critical shortage	Shortage
Social Studies	Adequate	Adequate
Special Education	Critical shortage	Low supply
Guidance and Counseling	Adequate	Information not available
Vocational-Technical	Critical shortage	Low supply

1 Descriptions of the Florida supply are based upon data compiled by the State Department of Education. (See Table 1 in Appendix II). The descriptions are based upon the amount of increase in production which would be required to meet projected needs for the 1968 school year. If the required increase is less than 10% the supply is labeled "adequate." If required increase is from 10% to 25% the label is "low supply." If the required increase is from 26% to 70% the label is "shortage." If the required increase is greater than 70% the label is "critical shortage."

2 Descriptions of the national supply are from Teacher Supply and Demand in Public Schools, 1967, Research Report 1967-R18. Washington, D. C.: Research Division, National Education Association, 1967, p. 55.

## Supply and Demand of Junior College Personnel

During the past ten years the percentage of students enrolled as first-time-in-college students in the public junior colleges in relation to the total enrolled in all institutions of higher learning in Florida increased from 20.4% to 65.4%. Over the next ten years enrollment in junior colleges is expected to increase by more than 75,000 full-time equivalent students. To provide for this growth and to provide replacements for departing instructional faculty, an estimated 5,800 new teaching and administrative personnel will be needed.

Approximately 36% of the new instructional personnel are recruited from graduate schools, 29% from high school teaching, 14% from elementary and college teaching, and the remaining 21% from business, government and military service, etc.

Surveys over the past years have indicated a critical shortage of instructors in the mathematics and science areas and the technical areas, such as data processing, nursing, civil engineering and dental hygiene. The greatest shortage of qualified instructors over the past few years has been in the mathematics and physical science areas.

TABLE 3

**ESTIMATED NUMBER JUNIOR COLLEGE  
INSTRUCTIONAL PERSONNEL NEEDED 1967-68 TO 1977-78**

	Estimated Number Personnel	Estimated Number New Personnel
1967-68*	4250	993
1968-69*	5150	990
1969-70	5665	819
1970-71	6231	623
1971-72	6543	343
1972-73	6870	360
1973-74	7214	378
1974-75	7575	397
1975-76	7953	416
1976-77	8350	437

\*Increase in faculty due to establishment of new colleges, additional faculty needed for colleges in second and third years of growth, and additional faculty in area vocational centers including growth in occupational training.

A sampling of older colleges indicates a 3% to 8% turnover in faculty with an average of between 5% to 6%. Approximately one to two percent (1% to 2%) of instructors employed during previous years did not return.

Source: Division of Community Junior Colleges,  
State Department of Education

### Continuing and Inservice Needs

It is likely that in future years greater amounts of teacher education will take place as inservice or continuing education than as preservice education. This assertion is based upon the assumption that rapid changes in knowledge and technology will make it even more imperative that teachers continue to learn. Colleges and universities will play an important role in this continuing education, but the magnitude of the task will preclude the possibility of college personnel actually conducting the training. Instead, the colleges will provide specialized advance training for the educational leaders -- senior teachers, senior administrators, and supervisors. These people will in turn be responsible for most of the inservice education. This concept of the role senior institutions in inservice education was endorsed by the Florida Teacher Advisory Council at its fall 1968 meeting.

Even as universities concentrate their efforts on preparing leaders, it is still likely that there will be a strong increase in demand for continuing education programs for teachers in service. The demand for credit courses in planned programs for advanced degrees is expected to increase. Also, universities will be called upon to assist in offering a greater number of non-credit activities in connection with inservice educational programs in local school districts. The extent of such programs has increased significantly as a result of recent actions of the Florida Legislature and the State Board of Education. In the 1968 special session, the Legislature enacted legislation requiring each local school board to develop a comprehensive program of staff development. In the same session, the minimum foundation program was modified to provide a non-categorical "education improvement expense." First priority in utilizing this appropriation is to be directed toward staff development. In addition, the State Board of Education passed regulations allowing teachers to extend their

teaching certificates on the basis of work completed in comprehensive inservice education programs conducted by local school districts.

In the face of increased demands for inservice education, it can be noted that the State University System is not currently able to meet the express needs of county school systems in Florida for continuing education courses for teachers. During 1968-69, for example, county school systems requested 1220 continuing education credit courses for teachers in quarters I, II, and III. Only 926 were offered.

A recent proposal by a leader in the field of teacher education called for changes in usual efforts in staff development made by the school systems, State Department of Education, and collegiate institutions.

The major emphasis in school system inservice programs should be on efforts by faculties in individual school buildings to improve their services. As needs emerge from these building-centered efforts for teachers in such areas as science, mathematics, music, art and the like to come together on a systemwide basis, provision should be made for that kind of activity. The teachers, administrators, and supervisors in the schools should be drawn upon to provide leadership, but the collegiate institutions should be the major resource. In fact, it would be advantageous for schools to have contracts with universities for such help. The major functions of collegiate faculties in the inservice programs are to help teachers visualize an educational program better even than the present best practice and to assist them in developing a rationale in terms of learning theory for what they are doing. Local school leadership should provide the major help needed to improve present practice.<sup>2</sup>

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<sup>2</sup>W. Earl Armstrong, "The Further Education of Teachers in Service." The Journal of Teacher Education. Spring, 1968, p. 37.

Thus it can be seen that the emerging pattern for staff development of educational personnel calls for close, coordinated, cooperative effort between college faculties, the State Department of Education, and local school systems.

In addition to state and local support, some additional financial assistance is available from the federal government under the Education Professions Development Act. This act provides for continuance of institute-type programs which were formerly funded under the National Defense Education Act. It also provides funds to initiate some new types of inservice programs.

These efforts are indeed timely in view of the fact that 60% of all new teachers employed in Florida each year complete their education in institutions of higher learning outside the state and therefore have little or no previous knowledge of Florida's educational program. In the 1966-67 school year, 11,328 teachers were employed to fill teaching vacancies in Florida schools. Of this number 9396 or 83% of the vacancies in Florida schools were filled by individuals who had not previously taught in the state. In this same year 41% of Florida teachers had five years or less teaching experience in Florida schools.

Fourteen percent of the persons teaching in Florida in 1965-66 did not return to teaching in 1966-67. The dropout rate for first year teachers was 13%. For teachers with two years or more of experience, the dropout rate was 10%. At the elementary level alone there were 3746 classroom teachers employed in 1965-66 who did not return in 1966-67. This is three times the number of elementary candidates graduated from all Florida institutions in 1966. In 1966 only 59% of the Florida teacher education graduates entered teaching in Florida.

Fortunately such facts as these have been recognized by both federal and state

legislatures and support for expansion and improvement of inservice teacher education has been provided. Every indication points to a need for increasing rather than diminishing the amount of assistance from teacher education institutions in helping county school systems assess their inservice needs, establish priorities, plan and implement programs of educational improvements.

Some Additional Factors Relative to the Staffing of Florida's Public Schools

It must be recognized that all projections of future manpower needs are accurate only to the degree that all factors which affect change are built into the projections. The Task Force did not consider it feasible to attempt to take into account all possible changes in their projections. The projections presented are based on maintaining present programs and programs which have been legally authorized. There are numerous factors which could affect these projections.

Some of these factors are:

- .... need for teachers for non-public schools, Head Start, and migrant education projects,
- .... expansion of curricular offerings supported by federal funds,
- .... expansion of vocational and technical programs,
- .... demand of military service on both young men and young married women teachers,
- .... change in turnover rate for teachers,
- .... change in rate of re-entry of former teachers,
- .... unexpected rates of growth and enrollment,
- .... changing distribution of demand for new teachers among high school subjects,
- .... increased opportunities for employment by business and industry especially in technical and scientific fields,
- .... trend for teacher preparation programs to extend beyond the traditional four years,
- .... need for more effective programs for the preparation of principals and other administrative and supervisory personnel,
- .... improved induction into teaching for new teachers to increase teaching effectiveness and to reduce teacher dropout,

- .... probable trend toward differentiated staffing,
- .... fluctuation in Florida's relative position in teacher salaries as compared with other states.

#### Summary and Conclusions

At the present time Florida is a debtor state in the production of teachers. While we are now experiencing shortages in the production of teachers, this situation can be expected to change rapidly in the next ten years. When the two new state universities (University of West Florida and Florida Technological University) have been fully staffed and already authorized facilities have been completed, and when the two newest state institutions, the University of North Florida in Jacksonville and Florida International University in Miami are in operation, Florida will be in a position to meet its manpower needs for educational personnel. With the prospect in view of being able to meet our needs quantitatively, we should be addressing our efforts in teacher education more toward qualitative improvement.

Improved selection of teacher candidates and improved induction into beginning teaching might well increase Florida's teacher supply substantially. If the dropout rate of 31% of first year teachers could be reduced the supply would be increased considerably.

**CHAPTER III**  
**RESOURCES FOR TEACHER EDUCATION**

## CHAPTER III

### RESOURCES FOR TEACHER EDUCATION

In Chapter II Florida's need for teachers in public schools, kindergarten through junior college, was described in considerable detail. Chapter III will describe resources currently available to teacher education programs in the State University System and additional resources needed if the requirements for educational personnel in Florida for the next ten years are to be met more adequately.

#### Teacher Preparation Programs Currently Available

In describing professional programs currently offered by the state universities, it was decided to present them according to the categories used in issuing certificates to teach in Florida's public schools.

Chapter II and detailed descriptive data in the Appendix identify numbers of certified teachers produced according to categories which closely resemble Florida certification categories.

Table 4 presents the certification programs in the state universities available at the time of this report. Only those categories are checked in which the entire sequence of required courses is offered. In many instances the university may offer some but not all courses required for a particular certification. Dates in Table 4 show when new programs are scheduled to begin.

Table 5 shows the number of state supported instructional personnel in each of the state universities currently in operation and number of students served.

## CERTIFICATION CATEGORIES

TABLE 4 - RANK I  
TEACHER CERTIFICATION PROGRAMS OFFERED  
IN STATE UNIVERSITY SYSTEM AND BEGINNING  
DATE OF NEW PROGRAMS

	UF	FSU	FAMU	USF	FAU	UWF	FTU
<u>Administration and/or Supervision</u>							
Administration	x	x		70	70		
Supervision	x	x				70	
<u>Supervision-Special Subj. or Field</u>							
(Adult Ed., Art, Guid., Elem., Eng.,							
For. Lang., Ind. Arts, Math, P.E.,							
Reading, Spec. Ed., Science, Social							
Studies)		x					
(All fields except Ind. Arts, H. Ed.,							
Food Services, T&I)	x						
Administration and Supervision	x	x		70			
Administration of Adult Education	x	x					
Addition of Adm., of Adult Ed.			x				
Adm. & Suprv. - Superintendents	x	x					
<u>Agriculture</u>							
Agriculture - Vocational		x					
Agriculture - General							
Art	x	x					
Bible							
<u>Business</u>							
Business Education	x						
Bookkeeping	x						
Stenography							
Driver Education			x				
Early Childhood Education	x	x			x		
Elementary Education	x	x			x		
English	x	x					
<u>Exceptional Child Education</u>	x						
Intellectual Disabilities	x	x		70			
Motor Disabilities			x				
Hearing Disabilities		x		70			
Visual Disabilities		x					
Speech Correction	x	x		70			
Varying Exceptionalities	x	x		70			
Occupational Therapy		x					
Physical Therapy		x					
Guidance	x	x		70			
Health Education							
<u>Home Economics</u>							
Home Economics - General		x					
Home Economics - Vocational		x					
<u>Industrial Arts</u>							
Separate fields of Industrial Arts							
Metals		x					
Woods		x					
Power & Trans. Mechanics		x					
Electricity & Electronics		x					
Crafts		x					
General		x					
Journalism		x					

## CERTIFICATION CATEGORIES

TABLE 4 - RANK I  
TEACHER CERTIFICATION PROGRAMS OFFERED  
IN STATE UNIVERSITY SYSTEM AND BEGINNING  
DATE OF NEW PROGAMS

	UF	FSU	FAMU	USF	FAU	UWF	FTU
<u>Junior High School</u>							
Junior High School English	x	x					
Junior High School Math	x	x					
Junior High School Science	x	x					
Junior High School Social Studies	x	x					
Junior High School Broad Field	x	x					
<u>Language (other than English)</u>							
Any Language							
French							
Spanish							
German							
Latin							
<u>Library &amp; A-V Service (Gr 1-12)</u>	x						
<u>Mathematics</u>	x	x					
<u>Music (Gr 1-12)</u>	x	x					
<u>Physical Education (Gr 1-12)</u>	x	x					
Reading (Gr 1-12)	x	x			70		
School Food Service		x					
<u>Specialist in School Psy. (Gr 1-12)</u>	x	x					
<u>Science</u>							
Biology	x	x			70		
Chemistry	x	x			70		
Physics	x	x					
<u>Social Studies</u>							
Broad Field	x	x					
<u>Separate Subjects</u>							
Economics							
Geography							
Political Science							
Sociology							
History	x						
<u>Speech</u>	x	x					
Visiting Teacher (Gr 1-12)		x					
<u>Vocational, Tech. &amp; Adult Education</u>							
General Adult Education	69	x					
Distributive Occ. Education	69	x					
Industrial Occ. Education	69	x					
Technical Occ. Education	69						
Health Occ. Education							
Office Occ. Education	69	x					
Cooperative Education	69	x					
<u>Adm. &amp; Suprv. of Voc. Education</u>							
Local Dir. or Co. Suprv. of Voc. Ed.	x	x					
Principal of Tech. or Voc. School	x	x					
Coordinator of Ind. Education		x					
Co. Suprv. of Coop. Education		x					
Co. Coord. of Adult Dist. Ed.	71	x					
Co. Coord. of Voc. Bus. Education		x					
<u>Junior College</u>	x	x		71	70		

## CERTIFICATION CATEGORIES

TABLE 4 - RANK IA  
 TEACHER CERTIFICATION PROGRAMS OFFERED  
 IN STATE UNIVERSITY SYSTEM AND BEGINNING  
 DATE OF NEW PROGRAMS

	UF	FSU	FAMU	USF	FAU	UWF	FTU
<u>Administration and/or Supervision</u>							
Administration	x	x		x			
Supervision	x	x		x			
Supervision-Special Subj. or Field (Adult Ed., Art, Guid., Elem., Eng., For. Lang., Ind. Arts, Math, P.E., Reading, Spec. Ed., Science, Social Studies)				x			
(All fields except Ind. Arts, H. Ed., Food Services, T&I)		x					
Administration and Supervision	x	x		x	69		
Administration of Adult Education	x	x					
Addition of Adm., of Adult Ed.		x					
Adm. & Suprv. - Superintendents	x	x		x			
<u>Agriculture</u>							
Agriculture - Vocational	x						
Agriculture - General							
<u>Art</u>	x	x		x			
<u>Bible</u>							
<u>Business</u>							
Business Education	x			70			
Bookkeeping	x						
Stenography							
<u>Driver Education</u>		x					
Early Childhood Education	x	x		x			
Elementary Education	x	x		x			
English	x	x		x			
Exceptional Child Education	x						
Intellectual Disabilities	x	x		x			
Motor Disabilities		x					
Hearing Disabilities		x		x			
Visual Disabilities		x					
Speech Correction	x	x		x			
Varying Exceptionalities	x	x		x			
Occupational Therapy		x					
Physical Therapy		x					
<u>Guidance</u>	x	x		x	69		
<u>Health Education</u>							
<u>Home Economics</u>							
Home Economics - General		x					
Home Economics - Vocational		x					
<u>Industrial Arts</u>							
Separate fields of Industrial Arts							
Metals		x					
Woods		x					
Power & Trans. Mechanics		x					
Electricity & Electronics		x					
Crafts		x					
General		x					
<u>Journalism</u>	x	x					

## CERTIFICATION CATEGORIES

TABLE 4 - RANK IA  
 TEACHER CERTIFICATION PROGRAMS OFFERED  
 IN STATE UNIVERSITY SYSTEM AND BEGINNING  
 DATE OF NEW PROGRAMS

	UF	FSU	FAMU	USF	FAU	UWF	FTU
<u>Junior High School</u>							
Junior High School English	x	x		x			
Junior High School Math	x	x		x			
Junior High School Science	x	x		x			
Junior High School Social Studies	x	x		x			
Junior High School Broad Field	x	x					
<u>Language (other than English)</u>							
Any Language							
French		x					
Spanish		x					
German							
Latin							
<u>Library &amp; A-V Service (Gr 1-12)</u>	x			x			
<u>Mathematics</u>	x	x		x			
<u>Music (Gr 1-12)</u>	x	x		x			
<u>Physical Education (Gr 1-12)</u>	x	x		70			
<u>Reading (Gr 1-12)</u>	x	x		x			
<u>School Food Service</u>		x					
<u>Specialist in School Psy. (Gr 1-12)</u>	x	x		x			
<u>Science</u>							
Biology	x	x		x			
Chemistry	x	x		70			
Physics	x	x		70			
<u>Social Studies</u>							
<u>Broad Field</u>	x	x		x			
<u>Separate Subjects</u>							
Economics							
Geography							
Political Science							
Sociology							
History	x						
<u>Speech</u>	x	x					
<u>Visiting Teacher (Gr 1-12)</u>	x	x					
<u>Vocational, Tech. &amp; Adult Education</u>							
<u>General Adult Education</u>		x					
Distributive Occ. Education	69	x		x			
Industrial Occ. Education	69	x					
Technical Occ. Education	x						
Health Occ. Education	69						
Office Occ. Education	69	x					
Cooperative Education	69	x					
<u>Adm. &amp; Suprv. of Voc. Education</u>							
Local Dir. or Co. Suprv. of Voc. Ed.	x	x					
Principal of Tech. or Voc. School	x	x					
Coordinator of Ind. Education		x					
Co. Suprv. of Coop. Education		x					
Co. Coord. of Adult Dist. Ed.		x					
Co. Coord. of Voc. Bus. Education		x					
<u>Junior College</u>	x	x		x	69		

## CERTIFICATION CATEGORIES

TABLE 4 - RANK II  
TEACHER CERTIFICATION PROGRAMS OFFERED  
IN STATE UNIVERSITY SYSTEM AND BEGINNING  
DATE OF NEW PROGRAMS

	UF	FSU	FAMU	USF	FAU	UWF	FTU
<u>Administration and/or Supervision</u>							
Administration	x	x	x		x	70	
Supervision	x	x	x		x	70	
Supervision-Special Subj. or Field (Adult Ed., Art, Guid., Elem., Eng., For. Lang., Ind. Arts, Math, P.E., Reading, Spec. Ed., Science, Social Studies)					x		70*
(All fields except Ind. Arts, H. Ed., Food Services, T&I)	x						
Administration and Supervision	x	x			x		
Administration of Adult Education	x	x					
Addition of Adm., of Adult Ed.			x				
Adm. & Suprv. - Superintendents	x	x			x		
<u>Agriculture</u>							
Agriculture - Vocational	x		x				
Agriculture - General			x				
Art	x	x			x	x	
Bible	x						
<u>Business</u>							
Business Education	x			x	x		69
Bookkeeping	x				x		
Stenography					x		
Driver Education		x					
Early Childhood Education	x	x		x	x		
Elementary Education	x	x	x	x	x	69	69
English	x	x		x	x	69	69
Exceptional Child Education	x						
Intellectual Disabilities		x	x		x	x	
Motor Disabilities		x					
Hearing Disabilities		x			x		
Visual Disabilities		x					
Speech Correction	x	x			x		
Varying Exceptionalities	x	x			x		
Occupational Therapy		x					
Physical Therapy		x					
Guidance	x	x	x	x	x	70	
<u>Health Education</u>							
<u>Home Economics</u>							
Home Economics - General		x	x				
Home Economics - Vocational	x		x				
<u>Industrial Arts</u>							
Separate fields of Industrial Arts							
Metals		x					
Woods		x					
Power & Trans. Mechanics		x					
Electricity & Electronics		x					
Crafts		x					
General		x					
Journalism	x	x					

\*Reading

## CERTIFICATION CATEGORIES

TABLE 4 - RANK II  
 TEACHER CERTIFICATION PROGRAMS OFFERED  
 IN STATE UNIVERSITY SYSTEM AND BEGINNING  
 DATE OF NEW PROGRAMS

	UF	FSU	FAMU	USF	FAU	UWF	FTU
<b>Junior High School</b>							
Junior High School English	x	x		x	x	69	
Junior High School Math	x	x		x	x		
Junior High School Science	x	x		x	x	69	
Junior High School Social Studies	x	x		x	x	69	
Junior High School Broad Field	x	x			x		
<b>Language (other than English)</b>							
Any Language		x					
French	x			x	x		
Spanish	x			x	x		
German	x				x		
Latin	x						
<b>Library &amp; A-V Service (Gr 1-12)</b>	x			x			
Mathematics	x	x		x	x		69
Music (Gr 1-12)	x	x		x	x		
Physical Education (Gr 1-12)	x	x	x	x	x		
Reading (Gr 1-12)	x	x		x	x	69	69
School Food Service		x					
<b>Specialist in School Psy. (Gr 1-12)</b>	x	x		x	x	70	
<b>Science</b>							
Biology	x	x		x	x	69	69
Chemistry	x	x		x	x	70	69
Physics	x	x		x	x		69
<b>Social Studies</b>							
Broad Field	x	x	x	x			69
Separate Subjects							
Economics					x	70	
Geography					x		
Political Science					x		69
Sociology					x	70	69
History	x			x	x	69	69
<b>Speech</b>	x	x			x		70
Visiting Teacher (Gr 1-12)	x	x					70
<b>Vocational, Tech. &amp; Adult Education</b>							
General Adult Education	x	x		x			
Distributive Occ. Education	x	x		x	x		
Industrial Occ. Education	69	x		x			
Technical Occ. Education	x			x			
Health Occ. Education	x						
Office Occ. Education		x			x		
Cooperative Education		x			x		
<b>Adm. &amp; Suprv. of Voc. Education</b>							
Local Dir. or Co. Suprv. of Voc. Ed.	x	x					
Principal of Tech. or Voc. School	x	x					
Coordinator of Ind. Education		x					
Co. Suprv. of Coop. Education		x					
Co. Coord. of Adult Dist. Ed.		x					
Co. Coord. of Voc. Bus. Education		x					
<b>Junior College</b>	x	x		x	x		

## CERTIFICATION CATEGORIES

TABLE 4 - RANK III  
 TEACHER CERTIFICATION PROGRAMS OFFERED  
 IN STATE UNIVERSITY SYSTEM AND BEGINNING  
 DATE OF NEW PROGRAMS

	UF	FSU	FAMU	USF	FAU	UWF	FTU
<u>Administration and/or Supervision</u>							
Administration							
Supervision							
Supervision-Special Subj. or Field (Adult Ed., Art, Guid., Elem., Eng., For. Lang., Ind. Arts, Math, P.E., Reading, Spec. Ed., Science, Social Studies)							
(All fields except Ind. Arts, H. Ed., Food Services, T&I)							
Administration and Supervision							
Administration of Adult Education							
Addition of Adm., of Adult Ed.							
Adm. & Suprv. - Superintendents							
<u>Agriculture</u>							
Agriculture - Vocational	x		x				
Agriculture - General			x				
<u>Art</u>	x	x	x	x	x	x	
<u>Bible</u>	x					x	
<u>Business</u>							
Business Education	x	x	x	x	x	x	x
Bookkeeping	x	x	x		x	x	x
Stenography	x	x	x		x		x
Driver Education	x	x	x				x
Early Childhood Education	x	x	x	x	x	x	x
Elementary Education	x	x	x	x	x	x	x
English	x	x	x	x	x	x	x
Exceptional Child Education	x						
Intellectual Disabilities	x	x	x	x	x	x	x
Motor Disabilities		x	x				
Hearing Disabilities		x					
Visual Disabilities		x					
Speech Correction	x	x	x				
Varying Exceptionalities	x	x	x				
Occupational Therapy		x					
Physical Therapy		x					
Guidance		x					
Health Education		x	x	x		x	x
<u>Home Economics</u>							
Home Economics - General	x		x				
Home Economics - Vocational	x		x				
<u>Industrial Arts</u>						x	
Separate fields of Industrial Arts							
Metals	x		x				
Woods	x		x				
Power & Trans. Mechanics	x		x				
Electricity & Electronics	x		x				
Crafts	x						
General	x		x			x	
Journalism	x	x		x			

## CERTIFICATION CATEGORIES

TABLE 4 - RANK III  
 TEACHER CERTIFICATION PROGRAMS OFFERED  
 IN STATE UNIVERSITY SYSTEM AND BEGINNING  
 DATE OF NEW PROGRAMS

	UF	FSU	FAMU	USF	FAU	UWF	FTU
<u>Junior High School</u>							
Junior High School English	x	x			x	x	x
Junior High School Math	x	x			x	x	x
Junior High School Science	x	x			x	x	x
Junior High School Social Studies	x	x			x	x	x
Junior High School Broad Field	x	x			x	x	
<u>Language (other than English)</u>							
Any Language		x					
French	x		x		x	x	x
Spanish	x		x		x	x	x
German	x				x	x	
Latin	x						
<u>Library &amp; A-V Service (Gr 1-12)</u>	x	x	x	x	x	x	x
<u>Mathematics</u>	x	x	x	x	x	x	x
<u>Music (Gr 1-12)</u>	x	x	x	x	x	x	x
<u>Physical Education (Gr 1-12)</u>	x	x	x	x	x	x	x
<u>Reading (Gr 1-12)</u>	x	x			x	x	
<u>School Food Service</u>		x					
<u>Specialist in School Psy. (Gr 1-12)</u>		x					
<u>Science</u>							
Biology	x	x	x	x	x	x	x
Chemistry	x	x	x	x	x	x	x
Physics	x	x	x	x	x	x	x
<u>Social Studies</u>							
Broad Field	x	x	x	x	x	x	x
<u>Separate Subjects</u>							
Economics	x		x		x	x	
Geography	x				x		
Political Science	x		x		x	x	
Sociology	x		x		x	x	
History	x		x	x	x	x	
<u>Speech</u>	x	x	x		x	x	70
<u>Visiting Teacher (Gr 1-12)</u>		x				x	
<u>Vocational, Tech. &amp; Adult Education</u>							
General Adult Education	x	x					
Distributive Occ. Education	x	x		x	x	x	
Industrial Occ. Education	69	x	x				x
Technical Occ. Education	x						x
Health Occ. Education	x						
Office Occ. Education	x	x			x	x	
Cooperative Education		x			x	x	
<u>Adm. &amp; Suprv. of Voc. Education</u>							
Local Dir. or Co. Suprv. of Voc. Ed.							
Principal of Tech. or Voc. School							
Coordinator of Ind. Education							
Co. Suprv. of Coop. Education							
Co. Coord. of Adult Dist. Ed.							
Co. Coord. of Voc. Bus. Education							
<u>Junior College</u>							

TABLE 5  
 INSTRUCTIONAL PERSONNEL AND STUDENTS SERVED  
 IN TEACHER TRAINING - SEPTEMBER 1968

	STATE SUPPORTED FTE'S	FTE'S ASSIGNED TO TEACHING		FTE'S ASSIGNED TO RESEARCH, COUNSELING AND ADMINISTRATION		STUDENTS SERVED (FTE)		
		NUMBER	%	NUMBER	%	UG	G	TOTAL
UF	116.7	96.3	82.5	20.4	17.5	1192.01	493.08	1685.09
FSU	173.88	154.42	88.8	19.46	11.2	1449.4	623.2	2072.60
FAMU	53.35	42.87	80.4	10.48	19.6	1089.6	267.2	1356.80
USF	120.43	105.43	87.5	15.0	12.4	1595.0	1044.0	2639.00
FAU	71.5	63.5	88.8	8.0	11.2	918.2	409.4	1327.60
UWF	60.5	51.5	85.1	9.0	14.9	980.0		980.00
FTU	14.0	11.5	82.1	2.5	17.9	205.2		205.2
TOTALS	610.36	525.52	86.1	84.84	13.9	7429.41	2836.88	10,266.29

### Classroom, Laboratory, and Other Space

#### University of Florida

There are 22 classrooms, one teaching auditorium, one library with 30,000 pieces of resource material exclusive of holdings in the main library, and six other instructional areas. The university provides 10,000 square feet of space for housing the research and training institutes. Of this 10,000 square feet, 9,000 square feet are paid for by overhead money made available to the state by federal grants.

#### Florida State University

There are 19 classrooms with the total capacity of 628 students. There is one lecture hall which seats approximately 200 students. There are 8 laboratories (3 science and 5 art) which are designed to accommodate 174 students. Thirty students are serviced by the reading clinic and 18 students are accommodated in the science seminar room. The College of Education also has activities and programs housed in 15 other buildings on campus.

#### Florida A & M University

Thirty-one classrooms are being utilized by the teacher education program. These facilities are located in seven different buildings on campus. The 31 classrooms have a total capacity of 1,258 students. Ten of the 31 classrooms are located in the new education building. These 10 classrooms will house 281 of the 1,258 students. The new education building has 9 laboratories. Approximately 252 students may be accommodated in the laboratories.

In addition, this building has an observation and discussion room, two individual counseling rooms, lecture hall, group therapy room, large group instruction center, special education complex, multipurpose room, audio-visual preview room, reading conference room, social studies laboratory, and a construction area room. These facilities are designed to house approximately 340 students.

University of South Florida

The College of Education building has 1 auditorium, 12 classrooms, and 3 multi-purpose rooms. Office space is available to accommodate 68 faculty members.

Florida Atlantic University

Florida Atlantic University does not have an education building. No space is assigned specifically to the College of Education. The College does have an open assignment to all classroom space in the university because of the large number of students enrolled in the professional education program. Throughout the campus there are 54 general classrooms, 4 seminar classrooms, 25 teaching laboratories, and 2 other rooms designed for band and choral work, making a total of 85 classrooms. These classrooms have been available to students in education, because the enrollment has been so large. It should be pointed out that the classroom space listed above was not designed primarily for the needs of professional education, with the possible exception of the learning laboratory classrooms which were designed for total university instruction.

University of West Florida

There are no classrooms or laboratories specifically designated for the teacher education program. The teacher education program has access to all of the facilities of the University. At the present time there is a total of 27 classrooms which range from 15 to 105 in student capacity. In addition to the classrooms, there are also available 18 science laboratories, 5 art studios, a dramatic studio, and a music room which includes 10 private practice spaces. A curriculum library for education students is provided in the main library of the University.

Florida Technological University

Florida Technological University does not have an education building. No space

is assigned specifically to the College of Education, except a special room equipped for business education. The College does have an open assignment to all classroom space in the University because of the large number of students enrolled in teacher education. Throughout the campus there are 18 general classrooms, 9 seminar rooms, 14 science laboratories, 1 language laboratory, 1 art laboratory, and 1 large lecture hall with a seating capacity of 275 students.

The College of Education plans to provide all teacher education majors with an opportunity to have planned learning experiences in a laboratory setting. The laboratory experiences are specifically designed to blend practical experience with theoretical knowledge. Selected elementary and secondary schools in central Florida will serve as educational laboratories (teacher education centers) for the students of the College of Education.

#### Library Space and Resources

##### University of Florida

There is an education library with 30,000 pieces of resource material exclusive of holdings in the main library. Holdings in the main library which are used primarily in the program of teacher education consist of works in the major teaching fields, plus holdings in such supportive areas as economics, management, sociology, psychology, anthropology, health, etc., that are frequently used.

##### Florida State University

The Strozier Library contains over 826,874 catalogued books and periodicals, plus extensive collections of maps, documents, pamphlets and pictures. In addition to these, the library has a growing collection of microprints, microfilms, microfiches, and microcards. The library receives more than 100 newspapers including local, national, and foreign titles, and subscribes to more than 7,000 periodicals and serials.

In addition to the regular library resources, a curriculum library is maintained which includes some 10,000 separately listed items related specifically to education.

Florida A & M University

S. H. Coleman Library, the main library of the Florida Agricultural and Mechanical University, is a three story fireproof brick and concrete building of traditional design. On the first and second floors are the general books and periodical collections, with the reserved books and periodicals sharing a room on the first floor, and the card catalog, general circulation, and general reference books occupying the second floor.

The Coleman Library contains approximately 100,000 volumes, supplemented by holdings in departmental libraries in other buildings as follows:

1. Curriculum Laboratory	14,587
2. Library Service Library	4,413
3. Music Library	1,000
4. Vocational Technical Institute	2,214
	—
	22,214

In addition to the books, Coleman Library, the Curriculum Laboratory, the Library Service Library, and the Vocational Technical Institute Library have growing collections of filmstrips, films, phonodiscs, and tapes. Coleman Library has an extensive collection of microfilm and microcards. It subscribes to over 1,000 current periodicals and 77 current newspapers.

No separate file of teacher education material is maintained in the Coleman Library. Holdings in teacher education are adequate in quality but not in quantity.

The curriculum laboratory is located in the new education building in Unit C on the second floor. The laboratory occupies the entire second floor. It is divided into two main areas. One houses the director's office, vertical and educational files collection, bound and unbound periodicals, professional books, curriculum bulletins, courses of study and study guides, state-adopted and supplementary textbooks, tradebooks for juveniles, current educational periodicals, reference sets, college and university catalogs, and a limited selection of films, filmstrips, maps, and other enrichment materials. The other area houses an office-workroom, a group instructional-learning laboratory area, a storage area for manipulative devices, mechanical equipment, and textbooks that are no longer in adoption.

#### University of South Florida

In addition to holdings in the main library, the College of Education has available for its use a curriculum laboratory of 20,620 catalogued holdings, and 1,500 uncatalogued materials. Holdings in the main library are adequate in the professional education areas and in the areas of specialization in elementary, K-12 and secondary education.

#### Florida Atlantic University

There are approximately 170,000 volumes in the main library. Of these, approximately 5,000 are directly related to education and psychology. Current budget provides for \$30,000 which is to be used by education faculty members. There are 1,100 volumes in the curriculum library. There are also 35 tapes, audio-visual materials, machines used in reading, globes, maps, standardized tests, curriculum guides, professional magazines and periodicals.

### University of West Florida

The total collection of the University of West Florida library consists of approximately 183,000 volumes including books, periodicals and microfilm. There are approximately 4,000 books, 1,500 periodicals, 1,600 curriculum titles and 415 documents relating directly to education in the library collection. Eighty titles of educational periodicals are on the current subscription list. In addition to the materials classified for education, there are many volumes in such disciplines as psychology, sociology, political science, art and music, which provide supporting resources for the teacher education program.

### Florida Technological University

Upon opening in the fall of 1968, the university library contained some 50,000 volumes of books and bound periodicals in all fields, including a significant collection in teacher education. Some 1,100 periodicals are received currently, and the library has been designated as a depository for both state and federal documents. A curriculum laboratory, operated as part of the Library and Instructional Media Area will contain textbooks and other curriculum materials which will be used extensively by students in teacher education programs. The library is receiving microfiche copies of all ERIC documents issued by the United States Office of Education, as well as other books, journals, etc., in the field of educational research and teacher education. As programs develop, library and media facilities will be enlarged to provide the needed materials and services.

### Supporting Facilities and Personnel

### University of Florida

Additional supporting facilities include the following: reading clinic, speech

and hearing clinic, human development center of the medical center, computer center, research institutes in the areas of curriculum, leadership, human development, and higher education, educational television studios with closed circuit connections to the laboratory school, various resources in cooperating colleges such as College of Arts and Sciences, College of Physical Education and Health, College of Architecture and Fine Arts, and P. K. Yonge Laboratory School with a staff of 60 faculty members.

#### Florida State University

Examples of supporting facilities and personnel available to the College of Education are as follows: The Reading Clinic, the Institute for Human Development, Speech and Hearing Clinic, the Off-Campus Laboratory Program, the Educational Broadcasting Services, the FSU Computer Center, the Computer Assisted Instruction Center, and the Division of Instructional Research and Service which includes instructional media, evaluation services and research and development activities related to the impact of the university upon the student's development.

#### Florida A & M University

Supporting services include the Reading Clinic, Test Service Bureau, Audio-Visual Center, Campus Laboratory Schools, Speech and Hearing Clinic, and Sociology Laboratory. Various workshops and institutes provide opportunity to study and experiment with educational innovations, namely, Thirteen College Curriculum Project, Upward Bound Program institutes dealing with disadvantaged youth, and student teaching workshops.

#### University of South Florida

In addition to a new college of education building specifically designed for large group - small group instruction, the university provides numerous supporting facilities and personnel. Additional supporting facilities include the following:

Developmental Center, housing reading, speech/hearing, and psychological services, Computer Center, Learning Center, educational TV and FM radio studios, Educational Resources, including audio-visual and curriculum laboratories, and Institute for the Study of the Exceptional Child and Adult. As there is not a laboratory school on campus, the county school systems of the immediate area are providing a wide range of laboratory facilities.

Florida Atlantic University

Other supporting facilities and personnel include a computer center, a large learning resource center with three TV production studios, and the Alexander D. Henderson University School. Four public school teachers are being added to the professional education faculty on a yearly basis to encourage the blend of theory and practice.

University of West Florida

The Department of Instructional Services is one of the important supporting facilities for the teacher education program. This department provides all of the audio-visual services for the teacher education program including television production, video-tape recordings, film strip productions, transparencies and other visual aids. The technical staff of the department works very closely with members of the education faculty in the development of curricula materials to support the instructional program. At present, the department is cooperating with the elementary education faculty in the development of a number of single concept video-tapes for use in the elementary education program.

The services of the Computer Center are also available to support the teacher education program. Although the facilities of this center are not being used extensively by the education faculty at the present time, it is anticipated that its use will increase in the months immediately ahead.

Florida Technological University

A Development Center which provides a program of educational, vocational, and personnel counseling services will be available to assist the student in diagnosing and correcting problems which impede effective learning ( or effective performance as a prospective teacher). Personnel in the center include a full-time director-counseling psychologist, a support counseling psychologist, a part-time reading clinician, and a part-time speech-hearing clinician.

A Department of Instructional Media functioning as an integral part of the Division of Instructional Resources includes the following services for students: a learning laboratory currently organized for the teaching of foreign language with capabilities for the teaching of physical education skills, art and music appreciation, self-instruction in the operation of audio-visual equipment and production of teacher-made visual materials, a graphics section capable of producing required graphs, charts and posters and of interpreting verbal ideas into a visual medium, a photography section consisting of photographic and studio facilities, a media laboratory with a curriculum library containing state-adopted textbooks, audio-visual self-instruction booths, record and/or tape listening areas, filmstrip and overhead transparency viewing area, and housing various models, maps, globes, realia, and instructional kits. With appropriate financial support, the media laboratory could become a multi-purpose teaching demonstration center continuously updated to reflect progress in the field of instructional technology. The media laboratory also houses a library of films, filmstrips, records, overhead transparencies, etc., and all types of audio-visual equipment. Four video-tape units are available for use on campus in teacher education centers.

## Additional Resources Needed

### University of Florida

During the fall quarter, 1968-69, enrollments in professional education courses generated 24,797 student quarter hours, 18,880 at the undergraduate level, and 5,917 at the graduate level. The College of Education earned 184.8 FTE positions. The college had a staff of 116.70 positions. Such a student-faculty ratio cannot be maintained over an extended period of time. Considering current staff and physical facility limitations, the undergraduate enrollment must be reduced approximately one-third in order to provide conditions necessary for maintaining a satisfactory undergraduate teacher education program. Such action will reduce the supply of new teachers produced by about one-third. The areas now experiencing the greatest pressure from enrollment are elementary education, language arts, and social studies. With current staff, additional teachers could be prepared in foreign language, physical sciences, school library work, and vocational areas, particularly agriculture.

Areas that could be developed, and need to be developed more extensively are vocational education, science education, special education, early childhood education, elementary education and school librarians.

In keeping with the master plan for the maximum enrollment of 25,000 students in 1975, the College of Education in its undergraduate programs could expand the service supply of new teachers by about 33% if adequate staff and physical facilities were provided. Assuming that the overall increases in this area would be maintained in proportion to the current ratio of education students to total university population, the university would increase its current supply of new teachers by about 200, to a total of 850. To approach the current need of the state for 11,629 new teachers in 1969-70, the college should be producing 2,000 new teachers this year.

The College of Education currently provides service in continuing and inservice education in the form of off-campus evening courses and summer programs. Problems of staff allocation and teacher-student ratios required in off-campus instruction make the maintenance of an adequate program of inservice education difficult. These programs should be expanded if needs of inservice teachers are to be met. Under projected growth patterns, it is expected that this growth will continue in proportion to that of graduate enrollment at the university. At the rate of two courses for each teacher every five years, the university needs to increase the services of this area 100%. To do this would require 28 additional staff.

The College of Education has made a substantial contribution to the profession by supplying to the state a considerable number of post-master's level personnel, including doctoral level people. This area of service is experiencing increased pressures from enrollment. The number of full time doctoral students enrolled has increased by 97% during the last three years. In all departments the present student-teacher ratio cannot be maintained without sacrificing the standards for a quality graduate program. Considerable expansion in terms of facilities and personnel at this level is demanded. It is expected that the number of people training for leadership positions can be increased by about 100% of the master plan enrollment projections, assuming staff and facilities are available. To meet state needs, the college should increase its supply of new leadership personnel by 100%, in addition to providing continuing and advanced training to those already in leadership positions. To meet these needs, additional space for instruction, research laboratories, library and instructional resources centers, faculty offices, and space for graduate students' study and research will be needed.

Florida State University

During the fall quarter, 1968-69, enrollments in professional education courses generated 29,219 student quarter hours; 3,492 in the lower division, 18,249 in the upper division and 7,478 at the graduate level. This represents 186.60 earned FTE positions, while the College of Education currently has 173.88 state supported FTE's. Such a student-faculty ratio cannot be maintained over an extended period of time. The excessive demands of classroom instruction detract substantially from research capabilities, experimentation in new instructional patterns and faculty development time to keep abreast with new techniques and new technology.

The lack of physical facilities is critical. As pointed out previously, components of the College of Education are housed in 15 places outside the education building. At times this kind of arrangement seriously jeopardizes program administration and program continuity. Further, the kind of space which is available is often incompatible with that which is needed to develop and teach new instructional strategies and utilize new educational technology.

In addition, there needs to be a marked growth in supporting personnel (e. g., secretaries, student assistants and graduate assistants), along with materials and new technological equipment, if we are to keep current with the growing demands of public education and promising innovations in the teacher-learning process.

In light of the above, the faculty of the College of Education at the Florida State University believe they are already operating below an optimal instructional environment for producing teachers for Florida schools. Should the growth pattern continue without proportionate relief in all of the areas outlined above, this college will be forced to severely restrict enrollment. This will certainly be incompatible with the obvious need, and designated

mission, of this institution to provide an increased number of teachers and educational leaders for Florida.

Florida A & M University

For extension of services and effective implementation of the goals of teacher education, the following additional resources are needed.

- .... closed circuit television,
- .... computer assisted instruction,
- .... language laboratory,
- .... production center,
- .... children's library collection,
- .... educational media center,
- .... program of diagnostic and remedial services,
- .... additional faculty needed in the areas of:
  - exceptional child education, (2)
  - audio-visual education, (2)
  - internship teaching, (4)
  - secondary education, (2)
  - health and physical education, (2)
  - secretaries, (2)
  - student assistants. (10)

University of South Florida

The staff of the College of Education will need to be doubled in the next two years. Based upon the university staff allotment per FTE, the College of Education is presently understaffed by approximately 30%. Anticipated growth in existing programs is conservatively estimated at 20% per year or 40% in two years. Projected new graduate programs and the anticipated lowering of the graduate FTE, production quota at the university will require 25 to 30% additional staff members.

The University of South Florida programs emphasize laboratory experiences in the public schools as integral parts of course instruction. To support this off-campus laboratory program additional expense and operating outlay funds above that allotted to typical classroom instruction are needed.

list. This building is needed to provide space and facilities for clinical programs as well as laboratory type classrooms which will permit demonstration, observation and research of the teaching-learning process.

For the fall of 1969, the College of Education has been given temporary use of the new social science office building which provides an additional 65 office spaces, space for the Center for Educational Research, Center for Urban Education Studies, and the Center for International Education Studies.

During the 1968-69 year graduate students accounted for 39.6% of the FTE enrollment of the College of Education, a fact which justifies the stated need for facilities for graduate study in education.

#### Florida Atlantic University

There is no education building at Florida Atlantic University. An education building of some 100,000 square feet is needed for offices and special classrooms. Some of the equipment needed in the education building would include TV cameras, TV tape machine, and audio-visual equipment. For furniture and equipment \$800,000 would be needed. One year's operating expense would be in the neighborhood of \$50,000. New personnel would require an additional \$150,000. Graduate assistantship and fellowship would require \$28,700. Other facilities are necessary if we are to provide diagnostic and remedial services for speech, hearing, intellectual problems, guidance and counseling services.

#### University of West Florida

It is anticipated that the current ratio of teacher education students to the total enrollments will decline from 40% to approximately 30% as the size of the student body increases. Assuming that the Board of Regents projected enrollments (for instance 10,500 by 1974) for the University of West Florida is achieved, the university should graduate at the Rank III level about 1500 teachers annually beginning in 1974. A rough estimate in the annual number of graduates (bachelor's)

degree) from the teacher education program is as follows:

1969-70	750
1970-71	950
1971-72	1150
1972-73	1350
1973-74	1500

In the fall of 1968 there were approximately 60 full-time-equivalent faculty to staff the teacher education program. If the growth of the program occurs as projected, it will be necessary to add 12 to 15 new faculty members each year to staff the undergraduate program. A minimum total of 100 staff members will be needed for the 1973-74 school year.

If graduate programs are begun in 1969 as planned, it will be necessary to employ approximately 20 full-time-equivalent faculty during the first year. Anticipated growth in the graduate program will require the addition of approximately 5 full-time-equivalent positions during each of the next four years. By 1973-74 the total graduate faculty should be about 40. The continuing and inservice education credit programs will require approximately 8 full-time-equivalent positions in 1969-70 and should be increased to about 15 by 1973-74. As the University introduces graduate programs, it is expected that the demand for continuing education courses will increase substantially. Non-credit inservice programs and consultant services should not require additional staff.

In order for the University of West Florida to provide a superior quality pre-service program for the preparation of teachers and to fulfill its leadership responsibilities in programs for inservice teachers, it is imperative that facilities be provided on campus for educational research and development. Such facilities should include a school in which teachers in training would have the opportunity to engage in experimental programs, research, observation, demonstration teaching, and curriculum development. The center would also serve the

public schools of the area by providing clinical services, the dissemination of information on innovative and experimental programs in elementary and secondary schools, and opportunities for public school personnel to observe model programs in operation.

#### Florida Technological University

The Board of Regents projected enrollment for Florida Technological University indicates an estimated 3,200 total student enrollment for the 1969-70 academic year, 4,950 enrollment for 1970-71, and a continuous annual increase to total 15,000 students for 1977-78. It is estimated that approximately 25% of the total student enrollment will continue to be enrolled in the College of Education; thus the College of Education faculty and appropriate facilities must be increased accordingly if a quality program of teacher education is to be maintained. For example, 20 additional full-time teaching positions in the College of Education are necessary in 1969-70 to adequately support the undergraduate needs of teacher education majors who are included in a total enrollment of 3,200 students.

The College of Education emphasis on planned educational laboratory experiences in selected teacher education centers requires funding for such essential equipment in each center as a video tape unit, the allocation of sufficient transportation funds for appropriate faculty to visit and work at centers, and the allocation of sufficient staff time necessary for continuous coordination of the program in each center.

If graduate programs are initiated at the university during the academic year 1970-71 as planned, it will be necessary to employ additional full-time-equivalent faculty in the College of Education for this purpose.

#### Summary and Conclusion

Florida was shown to be an under producer of educational personnel in Chapter II. With so many shortages in preparation now existing, the scope of preparation

programs shown in Table 4 does not indicate unnecessary duplication of effort. Florida public schools and junior colleges can absorb the total output of teachers prepared in the next few years.

New programs shown in Table 4 are all higher levels of present programs, mostly at the University of South Florida which needs to double its staff within the next two years.

Criteria for approval of new programs are such that additions and expansions in role and scope of responsibility require justification on the basis of carefully validated needs before approval and funding by the state.

It is obvious that additional resources in staff, buildings, and equipment will be needed for teacher education on all state university campuses to handle adequately both present and future enrollments.

The three newest operating universities, Florida Atlantic University, University of West Florida, and Florida Technological University have no special building facilities for teacher education at the present time. If high quality teacher preparation merits serious consideration, then the construction of buildings for the Colleges of Education at Florida Atlantic University and Florida Technological University should receive top priority.

Since the Role and Scope Task Force on Teacher Education began work two additional universities, the University of North Florida in Jacksonville and Florida International University in Miami have been authorized and presidents appointed. Programs of teacher education have been authorized for both. These will also require staff, facilities, and equipment if they begin on the dates scheduled.

**CHAPTER IV**  
**DESIGNING AND EVALUATING TEACHER TRAINING PROGRAMS**

## CHAPTER IV

### DESIGNING AND EVALUATING TEACHER TRAINING PROGRAMS

At the present time there is no systematic and comprehensive plan for the assessment of the adequacy and quality of teacher training programs and for revising current programs and planning future developments in any of the state universities or at the State University System level.

There are, of course, numerous individual research projects in teacher education and in some of the state universities there are organized research and development units and service agencies as well as specialized laboratory centers.

These, however, are designed to focus on specialized components or segments of teacher preparation, or to investigate educational problems not directly related to the preparation of teachers. No state university has a program of research and evaluation of teacher training which could properly be described as all-encompassing, continuous, and systematic. None has set up a unit with full time responsibility for comprehensive evaluation of the program of teacher training and continuous research designed to yield reliable data as to the quality of teacher programs, cost effectiveness, and management efficiency.

At the state-wide level there has been some evaluation of programs of continuing education of teachers. Such evaluation has, however, been confined largely to determination of the degree to which off-campus programs for teacher education have been consistent with Board of Regents policies and with on-campus teacher education. For several years (1962-65) there was one staff member at the system level with assigned responsibility for research and evaluation of continuing education. This position, however, no longer exists.

In gathering data for this section of the Role and Scope Task Force Report each state university was requested to respond to three questions:

- (1) What resources now exist in your institution for continuous and systematic assessment of the adequacy and quality of teacher education programs?
- (2) What is planned for the future in your institution?
- (3) What additional resources does your institution need for research, evaluation, and future planning for teacher education?

Responses to these questions revealed that some personnel, facilities, equipment, and organizational patterns for research and development in teacher preparation exist in each of the older institutions. The newer state universities such as the University of West Florida and Florida Technological University have little in the way of specialized personnel and facilities at the present, but are planning for them in the future. A major weakness throughout the State University System seems to be lack of support necessary to effectively focus existing resources on teacher training in a full-time coordinated effort.

Each of the state universities is acutely aware of its need to strengthen research and development capabilities in teacher education and each has plans for improvement. These plans include such items as: identification of unique research and assessment capabilities for research and evaluation in teacher education, developing a model for training elementary teachers, using research oriented graduate students in a more systematic and coordinated manner, development of special laboratory and study centers, and development of more effective instruments for securing feed-back from the public schools.

Each of the state universities indicated need for additional resources if it is to mount a major effort toward an effective, fully functioning program of research and development in teacher education. Additional resources needed include: additional personnel, facilities, and computer time.

In order for teacher development programs in our state universities to operate at high levels of both efficiency and economy, it will be necessary for them to become proficient in the use of the most effective and up-to-date intellectual and technological tools currently available. The role of the classroom teacher must change dramatically within the next few years if the new intellectual and technological tools fast becoming available are to be successfully used in our schools. The use of highly sophisticated approaches to problem solving pioneered in industry and in the military are neither understood nor used in any significant way at the present time in solving problems in teacher education. The state universities are aware of this need and, in some cases, have planned definite steps in this direction.

The operations analysis approach has not been used to any great extent in planning and evaluating the training of teachers. This is understandable when one recognizes that this approach calls for a rare and expensive combination of talents in the field of mathematics, research, computer technology, and education. Such talents can be found already in our state universities but they are not found in the combination of working relationships necessary to effectively focus their talents on the task of teacher development. Assembling these talents into a research and development unit on one or more campuses with an assigned mission to review, evaluate, and redesign programs for the preparation of teachers would be a first step if the State University System is to have a high quality program of teachers who know both what to teach and how to teach.

Careful and precise definition of the teacher development mission of the State University System through use of the operations analysis approach would lead eventually to identification of desired teacher competencies in behavioral terms which would be subject to reliable and valid measurement and evaluation both as to efficiency and cost effectiveness.

Support for such an approach seems to be indicated by John Gardner in a discussion of the role and nature of education in terms of "the coming crunch

between expectations and resources." He said:

"Another inevitable consequence of the effort to husband resources and allocate them wisely is the attempt to predict future needs and expenditures. Our tradition of stumbling into the future is expensive. Intelligent use of limited resources requires orderly formulation of goals, evaluation of means to achieve those goals, and development of strategies and cost estimates for getting from where we are to where we want to be."<sup>3</sup>

#### Proposed Model for Design and Evaluation of Teacher Training

In order to clarify the requirements of a systematic and comprehensive program of research and development in teacher training, a model is presented in Figure 1 on page 58.

The point of beginning in this model can be seen in block 1. Specific objectives of the program of teacher training are stated, as far as possible, in behavioral terms which are subject to both validation and measurement.

It will be noted that components relating to program development and modification, implementation, measurement and observation appear in the bottom half of the model (blocks 2, 3, M1, M2, M3). Validation components (V1, V2, V3, V4, and V5) appear in the top half.

The locus of each activity can be readily identified as left of the center or right of center. University based activities appear on the left hand side, while those which are school-based are on the right.

The numerals 1, 2, and 3 identify steps in program development.

The system is essentially a "closed loop" design. Input relative to personnel needs (M5) is shown as an independent factor. The data which appear in Chapter II and Appendix I were designed to provide the kinds of inputs envisioned in M5.

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<sup>3</sup>"On the Roller Coaster of History" is the adaptation of John W. Gardner's address to members of the American Statistical Association in Washington, D.C., December 27, 1967, which was printed in the National Planning Association's publication Looking Ahead.

# MODEL FOR DESIGN AND EVALUATION OF TEACHER TRAINING

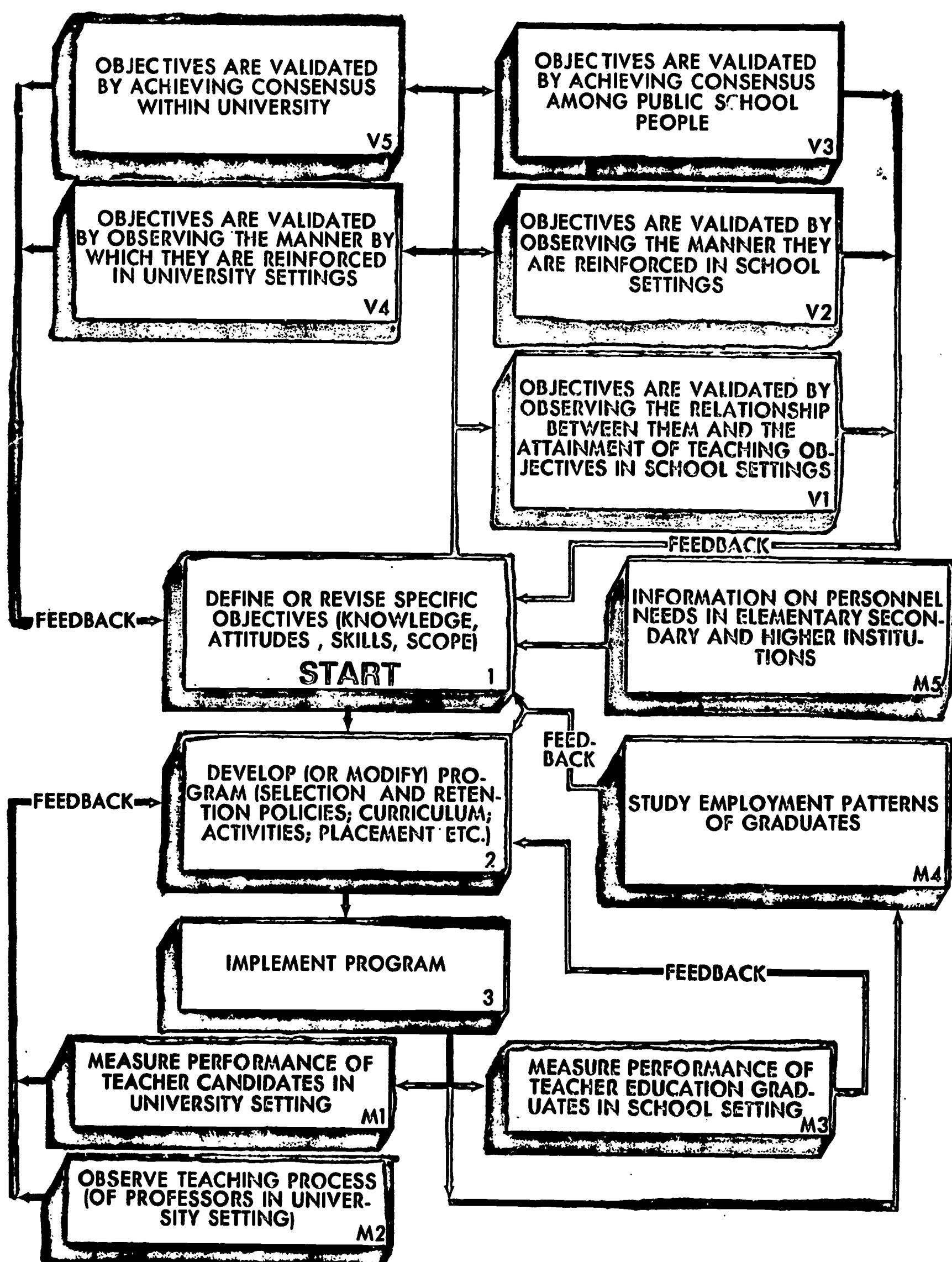


FIGURE 1

## Unique Aspects of Program Model

The operational analysis model that is proposed here suggests a framework within which systematic research and development functions can be carried on as a continuous teacher education institutional and inter-agency program for curriculum development, curriculum evaluation, curriculum modification, and program decision making. Implicit in this design is the existence of an inter-institutional research and development component. It will include people with required competencies, assigned to appropriate organizational relationships and having the time, facilities, and equipment to perform their designated tasks.

Initial parameters of the Model are as follows:

1. Continuous rather than periodic analysis and evaluation of pertinent data systems related to program structure and content, personnel performance, personnel requirements, along with material and facility support programs.

Through continuous and systematic data input we can hope to avoid critical lag in planning and decision making. Mobility, training trends, new technology, shifting population patterns and recruiting and retention capabilities all represent important input data for redefining institutional priorities for the teacher training mission. In addition, projections growing out of this continuous analysis may be expected to suggest procedures for avoiding an inadequate supply or over-abundant supply of a required resource. If, for example, a four-year analysis of personnel trends shows that personnel trained for a particular area are substantially below projections of personnel required, reasonable action can be introduced. It might be expected that this action will be beamed toward retraining, national recruiting, and retention techniques so as to bring the number of teachers trained in line with the number required.

This may even be accomplished with the more sophisticated eye toward the identification of personnel characteristics most compatible with the objectives of major recruiting and retention efforts as they apply to a given designation, geographic area and the like. Too, anticipated priority hierarchy can be expected to further assist in decision making related to the allocation of personnel and material resources which are in keeping with demanded thrusts in the training mission at the institution. Furthermore, an effort to develop compatible data systems for total program analysis and decision making will bring teacher training institutions and local educational agencies into a more formal and productive cooperative relationship.

2. Developed objectives to be stated insofar as possible as desired learned behaviors as part of a coordinated and articulated program.

This approach requires those responsible for the training of teachers to be as specific as the state of the art allows in setting forth in behavioral terms the objectives of the training program. Two concomitant activities should result: first, systematic faculty development activities aimed toward discriminating between those objectives which can be stated in behavioral terms and those which cannot but still demand forceful inclusion in the training program, and second, increased clarity as to what aspects of the training program can be accomplished in the institutional setting and what aspects can best be achieved through articulated training activities conducted by local educational agencies during and after the institutional program. For example, a training institution may require a prospective elementary school teacher to have fourteen hours of mathematics; a requirement which includes methods of teaching mathematics. By being more specific about the necessary skills contained in such requirements, there is an assurance that the skills have been acquired, not just hours met. Moreover, an operational analysis is likely to suggest a much broader concept of teacher training programs extending beyond four years or five years and pointing up the local educational agency's need to assume

training responsibilities for those aspects of the program not covered at the institution, e.g., certain aspects of evaluation, unique teaching environment, etc.

3. Integrated program analysis designed to monitor whether the stated objectives of the training program are being accomplished.

Again, systematic data input and cooperative program involvement between institutions and local educational agencies will enhance inter-agency capabilities for determining accomplishment levels and programmatic strengths and weaknesses. Furthermore, integrated program analysis can be expected to provide systematic appraisal techniques regarding the compatibility of stated objectives with a program design.

4. Systematic research activities paralleling the accomplishment of stated objectives.

The traditional approach to teacher education research is addressed to what has happened after it has happened. Subsequently, the research outcomes tend to reject or support program design without being able to identify how the many variables, at any point of time, have impinged upon the design or the learning outcomes. It is not surprising that this type of R&D activity tends to continually recycle a curriculum design effort over plowed ground or reinforce learning designs which may be irrelevant to desired individual performances. This model suggests that research activities are a viable part of program objective development and the determination of how well the training program accomplishes the objectives it sets out to accomplish. In the main, research design is an integral part of accomplishing objectives rather than trying to determine, to a greater or lesser degree, whether the objectives have been accomplished as an after-the-fact exercise. In short, this type of research parallels instructional activities as a support service for determining what is accomplished rather than deciding what should be accomplished.

5. Precise descriptions of the training institution's product, the educational environment in which the product is placed and, subsequently, what may be the relationship between the two.

A major aspiration of educational professional development is the attainment of a mutually beneficial employment atmosphere between the employer and the employee. In theory this can best be accomplished through matching, insofar as possible, the assessable unique professional characteristics and personal demands of the individual with similarly identifiable characteristics of the employment environment. In practice, there must be concerted efforts to describe with increasing precision the knowledge, skills, understandings and needs of the individual and those of the educational setting into which the individual may go. Such efforts at data collection and analysis should provide the basis for more sophisticated behavioral maximal effectiveness as it relates to the teacher and the environment in which he teaches. The descriptive efforts are required on the part of the institutions as well as the local educational agencies. Effectiveness is no longer just an English teacher. Effectiveness is an English teacher whose background, characteristics, desires and training capabilities coincide or complement those which the local educational agency has identified as producing a high correlation with successful teaching in that system.

In summary, these parameters, operating as integral components of a total system, provide the unique dimension of this model as it acts as an instrument for monitoring the creation and modification of pre-professional and professional development activities. Finally, as an operational analysis model it provides for, indeed encourages, institutional individuality through unique program structuring and resource utilization. In doing this, it suggests a rational framework in which to develop, implement, evaluate and refine program objectives through the systematic use of such resources.

### Conclusion and Recommendations

To redesign teacher education in the State University System of Florida through this approach would be a breakthrough of major proportions. The primary and most valuable effect would be to assure the children and youth of Florida quality teaching at a level hitherto only dreamed of. And it would be certain to give teacher education in the State University System national and international visibility.

Additional funds, specifically earmarked for this purpose, will need to be provided by the state in order to get this effort off the ground and in position to operate a research and development unit in teacher education on one or more campuses. The work of each unit should be coordinated through the Office of the Board of Regents so as to avoid duplication of effort and to insure dissemination of tested ideas and practices through the system.

A research and development unit in teacher education would not only serve to bring about advances in the preparation of teachers but would be likely, in time, to attract outside funds both from the Federal Government and from private foundations, perhaps far in excess of the state's investment.

The former Chairman of the Florida Board of Regents has given support to the idea of research and development in teacher education. In his dedication address for the new College of Education Building at the University of South Florida, Chairman Chester Ferguson said, "we must establish in each college of education a research and development unit with adequate staff, facilities and equipment".

We, therefore, recommend the following:

1. There should be established within the state a massive teacher education research and development program. Analysis, synthesis and implementation functions would be located at a central center which had as one of its major thrusts operational research characteristics. Research components

(e.g., behavioral objectives identification, multi-media materials analysis, teaching strategies, follow-up techniques, etc.) would be developed within the teacher education structure of the several universities. Coordination and encouragement functions would rest with the Board of Regents.

Full implementation of the model for training teachers presented within this document would be the initial objective of this R&D program. It must be expected that the funding for this will be sufficient to overcome inertia which tends to impinge upon the impact of innovative efforts on a lesser scale. In short, there are already good things going on which could advance the state of the art in teacher training at an accelerated rate far beyond existing implementation trends.

2. Teacher education professional schools should become the focal point for massive faculty development programs. These programs would parallel R&D component development described in number 1. In addition, these programs should be characterized by the emergence of coalescing pilot efforts which intimately involve local educational agencies, the State Department of Education along with university personnel.

While the pattern for this faculty development program may be varied to reflect the individuality of an institution's teacher education program, these patterns may be expected to be oriented toward bridging the gap between theory and practice. In addition, they may be expected to reflect new dimensions of interdisciplinary cooperation, emerging teaching-learning strategies, operational research techniques relevant to education, multi-media teaching-learning environment and the potential impact of new technology on the educational system.

Furthermore, these kinds of professional development activities should be organized in such a manner as to include the private institutions which are engaged in the training of teachers for Florida schools. In this vein, it must be recognized that the products of these institutions have a direct impact upon the development of Florida's public school programs and, therefore, should be called upon to play a discernible part in the upgrading of pre-service educational activities to ensure that their products are equally prepared to assume a leadership role in our rapidly changing educational environment.

**CHAPTER V**  
**IMPLEMENTATION AND RECOMMENDATIONS**

## CHAPTER V

### IMPLEMENTATIONS AND RECOMMENDATIONS

Many recommendations have been made or implied through this report. In this chapter the Task Force has identified those which seem to be most urgent. Certain findings revealed in the data included in this report seem particularly relevant:

1. At the present time, Florida institutions prepare less than half the number of teachers needed annually in the state.
2. Only sixty percent of teacher education graduates in Florida teach the immediate year following graduation.
3. Nearly one-third of the first year teachers fail to teach the following year.

Within these alarming percentages, there is evidence of chronic shortages in certain teaching fields. In some areas, Florida has critical shortages which are not shared nationally. Aside from the problem of numbers is the ever present problem of quality in preparation programs for new teachers, as well as excellence in the development and improvement of teachers on the job.

In seeking additional teachers for current needs it seems obvious that ways should be explored to acquire the services of those already prepared but who do not elect to teach following graduation. Further, the costly drop-out rate for first year teachers should be investigated. Critical shortages in such areas as mathematics, junior high science and elementary education should receive immediate attention.

In order to assure the children and youth of Florida high quality teaching in the schools the following recommendations are made:

1. Allocation of faculty teaching positions to each college of education should be made on the basis of the existing productivity formula.

A quality program cannot exist if colleges of education are expected to over-produce by means of large classes or by other means in order to support other activities of the universities. There should

either be substantial increases in support for the colleges of education or they should be authorized to limit enrollments to the numbers of students that can be accommodated in high quality programs with currently available resources. Resources of the universities should be shared with the colleges of education on an equitable basis.

It is recognized and appreciated that some highly important, necessary, and expensive university functions do not generate support by producing a high number of student credit hours. Support for such activities, therefore, should be provided on some other basis than student credit hours generated.

It is hoped that Program Planning Budgeting System (PPBS) now being designed for state operations will be helpful in this respect.

2. All continuing education courses for teachers are at the upper division and graduate levels. Student credit hours should generate faculty support at the same rate as on campus. It is inconsistent to require that off-campus course work be of the same quality as on-campus and then to require a much higher productivity ratio to generate support.
3. The state cannot afford a drop-out rate of thirty-one percent of first year teachers.

Consideration should be given to the establishment of a program which would allow universities and public school personnel to effectively work together in further instruction and professional help during the first year of teaching in Florida.

The above program would require a special formula for funding or special earmarked funds as it would be difficult to accomplish this plan under current FTE teaching position allocations. Each university could be assigned this responsibility within its geographic service area.

There should be an effort to experiment with a work-study type program whereby the prospective teacher might spend blocks of time with pay in actual teaching situations, scheduled concurrently with course work.

4. Teacher education in the State University System should be evaluated and redesigned as needed through the utilization of an operational analysis approach, as discussed in Chapter IV.

Problems of a research nature needing further study include:

1. Why do approximately forty percent of Florida teacher education graduates not teach the first year following graduation?
2. Why do nearly one-third of the first year teachers in Florida schools leave the profession after one year of teaching?

In some universities this systematic evaluation of teacher education programs is not necessarily a problem of additional personnel, but one of utilizing the time of available research oriented personnel for this specific purpose.

5. Programs involving laboratory experiences in public school classrooms must be adequately funded.

The excellence of laboratory experience relates directly to teaching effectiveness, to entering or not entering the teacher education program, to teaching the first year following graduation, and to reducing the first year drop-out rate. Schools utilized as laboratory schools require such equipment as video tape recorders, which are in essence the microscopes of a teaching laboratory. Necessary equipment for a teaching laboratory should be funded on a routine basis as is equipment for a biology laboratory.

6. The Board of Regents should take a major leadership role in encouraging institutional program thrusts in those areas where professional personnel are now, and are projected to remain, in short supply.

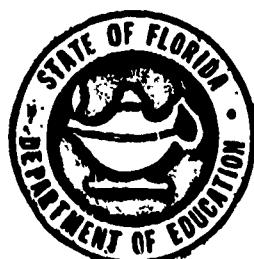
This will include the provision of adequate resources to existing institutional programs which, through expansion, can be expected to adequately meet state needs. Furthermore, new state institutions should be expected to concentrate their efforts on areas where it is not feasible to further expand existing programs to fully meet projected state needs thus avoiding the development of duplicate training programs which could lead to an over supply of personnel in some areas to the detriment of areas of critical shortage.

7. Concerted efforts should be made to accelerate building programs and the acquisition of support personnel to insure the optimal production of new teachers in the several state institutions.

**PROJECTIONS OF PERSONNEL NEEDED  
TO MAINTAIN PRESENT PROGRAMS  
IN FLORIDA PUBLIC SCHOOLS  
1969-1978**

- I. Introduction
- II. Pupil Membership by Grades
- III. Total Personnel Needs by Assignment Classification
- IV. New Personnel Needs by Assignment Classification

Note: The only factor which these projections take into account is anticipated growth in pupil membership. They do not provide for changes in class size, changes in curricular offerings or changes in the level of auxiliary services. Thus they represent base line data; they do not necessarily represent goals.



State of Florida  
Department of Education  
Floyd T. Christian, Superintendent  
June 30, 1968

## I. Introduction

This report was prepared to provide information for us by teacher education institutions in planning future programs. It was originally requested by the Role and Scope Task Force on Teacher Education appointed by the Board of Regents. The projections are based upon data collected by the Research Division and the Accreditation Section of the State Department of Education.

### How Good Are These Projections?

Projecting is a technique through which information on present or past conditions is "extended" or "projected" in an attempt to account for future conditions. In projecting, it is necessary to state specifically the assumptions which are to apply in extending the data. Consequently, projections which result are only as valid as the data and the assumptions upon which they are based.

Some of the basic assumptions which were made in order to generate the projections in the present report are listed below. The validity of the projections rests upon the tenability of these assumptions. A modification of any one of the assumptions will call for a corresponding modification of the projections. It was assumed that

1. birthrates in Florida will continue at the 1967 level;
2. migration of families with school age children will continue in Florida at the average rate for the years 1964-68;
3. the population of Florida in 1970-71 will approximate the series IB and IIB projections made by the U S. Bureau of Census;
4. subject and level of curricular offerings in public schools will remain as they have been from 1964 to 1968;

5. staffing patterns and class size in public schools will remain as they have been from 1964 to 1968;
6. dropout rates among teachers will continue as they were between the 1965-66 and 1966-67 school years and between the 1966-67 and 1967-68 school years;
7. the holding power of the schools will continue as it was from 1964-1968.

#### What Are the Next Steps?

These projections are viewed as a starting place--not as a finished product. They provide a basis for making better decisions but they will not lead to automatic decisions.

It is unlikely that all of the assumptions listed above are completely tenable. Changes occur rapidly in modern society and it is virtually certain that the schools will change also. However, there are so many alternative assumptions which could be made that this report would have become unwieldy had all the options been applied. Thus, the decision was made to make the original set of projections as one which will show the personnel required to continue the present educational program. To supplement this report, several additional sets of projections are possible.

Supplementary projections will be made as the need arises. Also, the projections in the present report will be updated as additional information--such as more recent birth figures, pupil membership figures, or teacher dropout figures--can be obtained.

#### Computer Assisted Planning

The State Department of Education is now developing a computer--based system for simulating educational conditions and, on this basis, projecting personnel needs. With this system, it will be possible to anticipate the probable effects

on personnel needs brought about by an infinite variety of changes in birth rates, migration patterns, curricular offerings, class sizes and course selection patterns.. This information can then be used in educational planning.

Glossary of Selected Terms  
Used in This Report

Survival ratio: A figure representing the proportion of pupils who "survive" from one stage to the next. For example, (a) if 100 pupils entered the first grade in September 1966 and only 95 pupils entered the second grade in September 1967, the survival ratio would be .95; or (b) if 100 pupils entered the second grade in September 1966 and 105 entered the third grade in September 1967, the survival ratio would be 1.05.

Equivalent full-time teachers: One teacher or a group of teachers who perform the duties which would normally be performed by one teacher assigned full time in that particular subject classification in a Florida school.

Dropout rate: The proportion of teachers assigned to Florida schools during one year who are not assigned to Florida schools the next year. For example, if there were 100 marine biology teachers in Florida in 1966-67 and only 75 of those teachers returned in 1976-68, the dropout rate for marine biology teachers would be .2500.

New teacher: Any teacher who was not assigned to a Florida public school during the preceding year.

Returning teacher: Any teacher who was assigned to a Florida public school during the preceding year.

## II. Pupil Membership by Grades\*

The following projections are based on the assumption that Florida birthrates for the next four years will continue at the 1967 level.

### Elementary Grades

	<u>First</u>	<u>Second</u>	<u>Third</u>	<u>Fourth</u>	<u>Fifth</u>	<u>Sixth</u>
1962-63	116,894	106,994	104,474	101,412	98,469	94,232
1963-64	120,299	111,759	106,891	105,074	101,510	98,287
1964-65	120,276	114,839	111,326	107,577	105,294	101,853
1965-66	122,594	114,728	114,777	111,890	107,570	105,801
1966-67	123,740	116,891	115,543	115,210	112,236	108,252
1967-68	125,195	119,048	118,128	115,584	116,191	113,310
1968-69	124,101	119,751	119,732	118,487	116,040	116,999
1969-70	123,542	118,704	120,438	120,096	118,954	116,847
1970-71	122,720	118,169	119,386	120,804	120,569	119,872
1971-72	114,793	117,383	118,848	119,748	121,280	121,408
1972-73	110,860	109,801	118,058	119,209	120,220	122,125
1973-74	107,679	106,039	110,431	118,416	119,679	121,057
1974-75	110,967	102,997	106,648	110,797	118,883	120,512
1975-76	114,256	106,141	103,588	106,972	111,203	119,711
1976-77	117,543	109,287	106,751	103,903	107,394	111,977
1977-78	120,832	112,431	109,915	107,075	104,312	108,141

\*Figures for the years 1962-68 were taken from reports submitted by principals at the end of the first month of each school year. Figures for the years 1968-78 were projected using the average survival ratios for the years 1965-68.

Secondary Grades

	<u>Seventh</u>	<u>Eighth</u>	<u>Ninth</u>	<u>Tenth</u>	<u>Eleventh</u>	<u>Twelfth</u>
1962-63	94,446	90,428	87,020	82,078	64,774	47,904
1963-64	99,758	91,394	88,032	83,803	73,809	57,884
1964-65	103,379	96,851	89,992	85,298	75,494	66,229
1965-66	106,825	101,388	95,434	87,833	76,754	67,923
1966-67	111,618	105,144	99,666	93,728	79,383	69,034
1967-68	114,417	109,901	104,354	98,828	84,769	70,856
1968-69	119,391	112,501	108,478	102,633	89,217	76,052
1969-70	123,278	117,392	111,044	106,688	92,651	80,043
1970-71	123,118	121,214	115,872	109,212	96,312	83,124
1971-72	126,210	120,057	119,644	113,960	98,591	86,409
1972-73	127,924	124,097	119,489	117,670	102,877	88,453
1973-74	128,679	125,782	122,490	117,518	106,226	92,298
1974-75	127,554	126,524	124,153	120,469	106,089	95,303
1975-76	126,980	125,418	124,885	122,105	108,753	95,180
1976-77	126,135	124,853	123,794	122,825	110,230	97,570
1977-78	117,987	124,023	123,236	121,752	110,880	98,895

**III. Total Personnel Needs by Assignment Classification\***

<u>Personnel Serving Elementary Schools (grades 1-6)</u>	<u>64-65</u>	<u>65-66</u>	<u>66-67</u>	<u>67-68</u>	<u>68-69</u>	<u>69-70</u>	<u>70-71</u>	<u>71-72</u>	<u>72-73</u>	<u>73-74</u>	<u>74-75</u>	<u>75-76</u>	<u>76-77</u>	<u>77-78</u>
Principals, Directors & Coordinators	1371	1380	1402	1420	1456	1463	1469	1452	1426	1391	1366	1347	1338	1349
Curriculum Assistants, Dept. Heads & Helping Teachers**	58	76	193	199	201	202	202	200	196	192	188	186	185	186
Librarians***	833	935	1081	1106	1117	1123	1127	1115	1094	1068	1048	1034	1026	1036
Guidance Personnel***	3	21	46	73	74	74	75	74	72	71	69	69	68	69
Elementary Teachers	4088	4065	4200	4203	4178	4159	4131	3864	3732	3625	3736	3846	3957	4069
First Grade	3788	3721	3825	3802	3893	3859	3842	3816	3570	3448	3449	3451	3552	3655
Second Grade	3561	3599	3508	3629	3749	3771	3738	3721	3697	3458	3339	3244	3343	3442
Third Grade														
Fourth Grade	3439	3511	3594	3540	3706	3756	3779	3746	3729	3704	3465	3346	3250	3349
Fifth Grade	3257	3282	3414	3454	3525	3614	3663	3684	3652	3636	3612	3378	3263	3169
Sixth Grade	3122	3186	3200	3261	3481	3476	3563	3612	3633	3601	3585	3561	3331	3217
Ungraded Primary***	398	742	972	1260	1264	1261	1253	1221	1178	1127	1115	1126	1159	1194
Ungraded Intermediate***	210	529	855	903	908	919	933	936	934	927	904	873	835	825
Special Elementary Teachers	183	196	453	517	523	525	527	522	512	500	490	484	481	485
Reading**	531	536	601	604	594	596	599	592	581	567	557	549	545	550
General Music														

\*Projections in this report are made under the assumption that present patterns of curriculum offering, class size, and personnel assignment will continue. Figures for 1964-68 represent the equivalent full-time teachers assigned to individual schools as of October 30. Except where otherwise indicated, figures for the years 1968-78 are projected using the mean ratios for the 1964-67 years between the number of teachers in an assignment classification and the number of pupils in the grades served by those teachers. All projections were made using the assumption that birth-rates will continue at the 1967 level.

\*\*Rates used for this projection were based upon 1967-68 figures only.

\*\*\*Rates used for this projection were based upon the mean ratios for the years 1966-68 between the number of teachers in an assignment classification and the number of pupils in grades served by those teachers.

**III. Total Personnel Needs by Assignment Classification (Cont.)**

	<u>64-65</u>	<u>65-66</u>	<u>66-67</u>	<u>67-68</u>	<u>68-69</u>	<u>69-70</u>	<u>70-71</u>	<u>71-72</u>	<u>72-73</u>	<u>73-74</u>	<u>74-75</u>	<u>75-76</u>	<u>76-77</u>	<u>77-78</u>
Special Elem. Teachers (cont.)	32	30	31	37	38	38	38	38	37	36	35	35	34	35
Instrumental Music**	70	568	723	820	829	833	836	827	812	792	777	767	761	768
Physical Education	128	159	214	227	226	227	228	225	221	216	212	209	207	209
Art***														
Other Elementary Teachers***	263	299	499	622	629	632	635	628	616	601	590	583	577	582
<b>Personnel Serving Secondary Schools (grades 7-12)</b>														
Principals, Directors & Coordinators***	1100	1210	1290	1352	1410	1463	1504	1544	1578	1606	1623	1630	1635	1615
Curriculum Assistants, Dept. Heads & Helping Teachers***, #	100	115	158	165	171	176	180	184	187	189	190	191	191	188
Librarians***	640	688	771	798	836	867	892	915	935	952	962	966	969	957
Guidance Personnel**	909	904	1169	1268	1323	1372	1411	1448	1480	1507	1522	1529	1534	1515
Seventh & Eighth Grades Self-Contained	123	113	95	122	124	128	130	132	134	136	135	135	134	129
Speech, Drama, & Journalism	231	262	273	277	290	302	312	321	330	339	343	346	350	349
Language Arts, Grades 7-9	2177	2289	2527	2620	2639	2728	2789	2841	2878	2918	2925	2917	2898	2817
Language Arts, Grades 10-12**	1660	1756	1861	1967	2067	2155	2225	2304	2383	2432	2476	2510	2543	2547
Mathematics, Grades 7-9**	1921	2016	2117	2139	2216	2289	2345	2389	2418	2454	2463	2457	2441	2378
Mathematics, Grades 10-12	1105	1175	1226	1237	1331	1385	1426	1480	1531	1549	1580	1603	1619	1615

\*\*Rates used for this projection were based upon 1967-68 figures only.

\*\*\*Rates used for this projection were based upon the mean ratios for the years 1966-68 between the number of teachers in an assignment classification and the number of pupils in grades served by those teachers.

#Data for 1964-65 were not available for this classification

**III. Total Personnel Needs by Assignment Classification (Cont.)**

	<u>64-65</u>	<u>65-66</u>	<u>66-67</u>	<u>67-68</u>	<u>68-69</u>	<u>69-70</u>	<u>70-71</u>	<u>71-72</u>	<u>72-73</u>	<u>73-74</u>	<u>74-75</u>	<u>75-76</u>	<u>76-77</u>	<u>77-78</u>
Science														
Junior High Science <sup>#</sup>	1484	1614	1706	1784	1892	1933	1967	1994	2021	2025	2018	2005	1948	
Biology, Grades 10-12	600	610	652	690	716	744	763	795	821	824	844	855	861	855
Chemistry, Grades 10-12	233	243	237	239	268	278	289	297	309	318	320	326	331	333
Physics, Grades 10-12	95	93	90	87	102	107	111	115	118	123	127	130	132	
Physical Science, Grades 10-12	135	147	143	142	159	166	171	177	183	188	191	194	197	197
Health & Safety***	94	104	131	136	141	146	149	152	155	157	158	158	158	153
Social Studies, Grades 7-9***	1574	1666	1763	1803	1881	1944	1987	2024	2050	2079	2084	2078	2064	2007
Social Studies, Grades 10-12***	1261	1348	1434	1494	1582	1650	1707	1765	1826	1872	1903	1929	1958	1965
Foreign Languages, Grades 7-9	411	407	417	423	458	472	486	497	501	510	513	510	500	
Foreign Languages, Grades 10-12**	464	492	510	611	640	666	686	711	736	747	761	772	781	780
Physical Education														
Men**	1051	1103	1161	1245	1293	1340	1374	1409	1437	1457	1470	1475	1474	1448
Women	990	1025	1069	1105	1158	1199	1229	1259	1283	1300	1311	1315	1313	1288
Driver Education	337	491	402	379	426	442	455	473	486	492	501	508	511	509
Music														
Instrumental	388	394	408	411	441	457	466	476	486	492	494	495	494	480
Vocal	210	217	200	234	244	253	260	267	273	278	280	282	283	279
General	266	269	280	279	300	310	314	320	326	329	329	328	327	313
Art	410	456	504	540	528	547	560	573	584	593	597	598	598	585
Business Education**	1106	1190	1287	1395	1470	1531	1585	1638	1685	1730	1760	1778	1801	1806

\*\*Rates used for this projection were based upon 1967-68 figures only.

\*\*\*Rates used for this projection were based upon the mean ratios for the years 1966-68 between the number of teachers in an assignment classification and the number of pupils in grades served by those teachers.

<sup>#</sup>Rates used for this projection were based upon the mean ratios for the years 1965-68 between the number of teachers in an assignment classification and the number of pupils in grades served by those teachers.

**III. Total Personnel Needs by Assignment Classification (Cont.)**

	<u>64-65</u>	<u>65-66</u>	<u>66-67</u>	<u>67-68</u>	<u>68-69</u>	<u>69-70</u>	<u>70-71</u>	<u>71-72</u>	<u>72-73</u>	<u>73-74</u>	<u>74-75</u>	<u>75-76</u>	<u>76-77</u>	<u>77-78</u>
Home Economics	886	933	963	1002	1051	1087	1126	1157	1177	1202	1218	1225	1226	1219
Agriculture	250	252	259	277	289	299	310	320	327	333	338	341	343	342
Industrial Arts	729	772	798	808	861	891	919	942	960	976	987	991	990	980
Technical & Industrial Education**	485	636	688	837	885	922	957	985	1022	1056	1065	1084	1102	1109
Study Hall**,#		136	152	88	91	95	98	100	102	104	105	106	106	105

**Personnel Serving Secondary  
& Elementary Schools  
(grades 1-12)**

Exceptional Child Education**,\$	1294	1497	1567	1856	1903	1941	1971	1984	1986	1979	1971	1963	1959	1955
Other Service Personnel**	166	188	272	378	388	396	401	404	404	403	401	399	293	292

\*\*Rates used for this projection were based upon 1966-67 figures only.

#Data for 1964-65 were not available for this classification.

\$Figures for the years 1964-68 are from annual reports of programs for exceptional children submitted to the State Superintendent.

## IV.

## New Personnel Needs by Assignment Classification\*

<u>Personnel Serving Elementary Schools (grades 1-6)</u>	<u>Dropout Rates</u>		<u>66-67</u>	<u>67-68</u>	<u>68-69</u>	<u>69-70</u>	<u>70-71</u>	<u>71-72</u>	<u>72-73</u>	<u>73-74</u>	<u>74-75</u>	<u>75-76</u>	<u>76-77</u>	<u>77-78</u>
	<u>New**</u>	<u>Returning Teachers</u> ***	Teachers											
Principals, Directors & Coordinators	.2164	.0821	59	52	159	148	146	124	109	97	102	108	149	153
Curriculum Assistants, Dept. Heads & Helping Teachers	.3907	.1015	23	20	27	29	30	27	24	22	22	23	26	30
Librarians	.2437	.0968	149	133	138	134	133	116	104	95	98	102	117	137
Guidance Personnel	.2612	.1015	6	10	10	9	9	8	7	7	7	8	8	10
Elementary Teachers														
First Grade	.3064	.0943	820	788	538	489	468	222	279	304	517	572	812	648
Second Grade	.3392	.1026	828	712	651	519	501	487	260	306	327	523	579	805
Third Grade	.3391	.1012	736	680	649	556	481	476	465	246	290	311	501	557
Fourth Grade	.3087	.1967	740	663	937	884	860	807	810	788	579	628	632	809
Fifth Grade	.2937	.0953	643	647	529	529	498	470	412	413	404	191	244	266
Sixth Grade	.2913	.0875	538	611	630	428	479	458	431	374	375	366	156	209
Ungraded Primary	.3161	.1256	231	236	207	195	187	161	141	124	153	180	253	255
Ungraded Primary	.3161	.1256	203	169	151	154	158	151	144	138	120	105	92	113

\*This table includes personnel required for growth and for replacement. Numbers of new personnel for 1966-67 were obtained by comparing assignment reports for the 1965-66 school year with those for the 1966-67 school year. Personnel who moved from one Florida county to another between 1965-66 and 1966-67 were not classified as new teachers. Comparable procedures were followed to determine the number of new teachers during the 1967-68 school year. Figures for the years 1968-78 are based upon the projections of total personnel needs for those years. To project new personnel needs, the mean dropout rates for new teachers and for returning teachers between the years 1965-66 and 1966-67 and between years 1966-67 and 1967-68 were applied.

\*\*New teachers in 1965-66 were identified by comparing 1965-66 accreditation reports with 1964-65 accreditation reports. Personnel who moved from one Florida county to another between 1964-65 and 1965-66 were not tabulated as new teachers. Dropouts among these new teachers were identified by comparing the 1965-66 accreditation reports with the 1966-67 accreditation reports. The dropout rate for those new teachers was obtained by dividing the number of 1965-66 new teachers who did not return in 1965-67 by the total number of 1965-66 new teachers. This same procedure was then followed for the 1966-67 year. The dropout rates given in this table represent the mean of the 1965-66 and 1966-67 figures.

\*\*\*All teachers not identified as new teachers were classified as returning teachers. Dropouts among returning teachers were identified by the same method as followed with new teachers and dropout rates were calculated in the same manner.

**IV. New Personnel Needs by Assignment Classification (Cont.)**

	<u>New Teachers</u>	<u>Returning Teachers</u>	<u>Dropout Rates</u>	<u>66-67</u>	<u>67-68</u>	<u>68-69</u>	<u>69-70</u>	<u>70-71</u>	<u>71-72</u>	<u>72-73</u>	<u>73-74</u>	<u>74-75</u>	<u>75-76</u>	<u>76-77</u>	<u>77-78</u>
<b>Special Elementary Teachers</b>															
Reading	.3447	.1643	64	97	-108	108	100	94	89	89	90	98	106		
General Music	.3383	.1153	142	130	88	91	83	76	70	71	72	81	91		
Instrumental Music	.2862	.1192	7	8	6	6	5	5	4	4	4	5	5		
<b>Physical Education</b>	.3161	.0868	215	206	127	105	100	86	76	68	70	73	73	99	
Art	.3106	.1486	56	63	42	41	41	38	35	33	33	34	37	41	
Other Elementary Teachers	.3161	.1256	119	117	107	102	101	92	85	79	79	82	91	102	
<b>Personnel Serving Secondary Schools (grades 7-12)</b>															
<b>Principals, Directors, &amp; Coordinators</b>	.2164	.0821	55	50	176	192	187	188	186	183	173	164	161	136	
<sup>80</sup> Curriculum Assistants, Dept. Heads & Helping Teachers	.3907	.1015	13	16	27	31	31	31	31	31	30	29	28	25	
Librarians	.2437	.0858	106	90	121	122	118	119	119	117	116	110	104	102	87
Guidance Personnel	.2612	.0968	153	131	199	210	206	207	206	204	195	186	183	160	
<b>Seventh &amp; Eighth Grades Self-Contained</b>	.4199	.1117	28	23	22	25	24	24	25	24	22	21	21	17	
<b>Speech, Drama &amp; Journalism</b>	.3340	.1610	54	55	68	70	71	71	73	74	72	71	71	68	
Language Arts, Grades 7-9	.3250	.1390	621	620	499	548	542	540	532	539	513	494	478	411	
Language Arts, Grades 10-12	.3250	.1390	458	466	461	460	455	474	487	471	469	466	468	445	
Mathematics, Grades 7-9	.3490	.1127	470	470	429	424	414	407	395	402	380	362	346	295	
Mathematics, Grades 10-12	.3490	.1127	272	272	297	275	262	277	283	258	266	264	259	240	
Science															
Junior High Science	.3044	.1184	444	443	339	342	324	320	322	303	289	280	232		
Biology, Grades 10-12	.3457	.1249	122	158	147	150	145	160	161	140	151	146	134		

**IV. New Personnel Needs by Assignment Classification (Cont.)**

	<u>New Teachers</u>	<u>Returning Teachers</u>	<u>Dropout Rates</u>	66-67	67-68	68-69	69-70	70-71	71-72	72-73	73-74	74-75	75-76	76-77	77-78
<b>Science (cont.)</b>															
Chemistry, Grades 10-12	.2819	.1303	45	39	66	56	55	54	59	59	52	56	56	53	
Physics, Grades 10-12	.3130	.0889	8	11	25	20	18	17	19	19	16	16	18	17	
Physical Science, Grades 10-12	.3044	.1296	37	35	42	35	33	34	35	35	33	33	33	34	32
<b>Health &amp; Safety</b>	<b>.3468</b>	<b>.1228</b>	<b>30</b>	<b>37</b>	<b>30</b>	<b>29</b>	<b>27</b>	<b>28</b>	<b>28</b>	<b>27</b>	<b>26</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>21</b>
Social Studies, Grades 7-9	.2819	.1129	381	353	341	333	319	315	308	312	293	279	268	221	
Social Studies, Grades 10-12	.2819	.1129	310	293	306	298	293	301	310	305	294	290	295	278	
Foreign Languages, Grades 7-9	.2901	.1310	86	90	104	90	90	89	83	88	84	81	76	69	
Foreign Languages, Grades 10-12	.2901	.1310	105	130	130	131	128	135	139	130	132	132	131	122	
<b>Physical Education</b>															
Men	.2999	.0763	198	204	189	187	179	179	175	169	162	153	146	120	
Women	.2882	.1238	254	249	231	222	215	218	215	211	206	200	193	169	
<b>Driver Education</b>															
Men	.2961	.0701	49	30	80	64	59	62	61	54	56	55	51	45	
Women															
<b>Music</b>															
Instrumental	.2444	.0941	49	70	79	69	62	64	64	62	57	56	54	40	
Vocal	.3595	.1197	41	40	48	50	49	50	50	50	48	46	46	41	
General	.3609	.1233	64	48	66	63	57	59	59	58	54	52	52	39	
<b>Art</b>															
Men	.3102	.1565	130	142	94	116	116	119	119	118	115	113	110	98	
Women															
<b>Business Education</b>															
Men	.2871	.1143	255	251	277	277	277	282	283	287	277	267	272	259	
Women															
<b>Home Economics</b>															
Agriculture	.3228	.1168	164	165	200	207	206	197	203	199	190	183	175		
Industrial Arts	.3276	.0792	37	49	47	45	46	45	43	44	42	40	39	36	
Technical & Industrial Education	.3320	.0798	134	154	156	139	133	130	126	124	120	113	107	95	
Men	.1971	.0491	124	150	111	97	95	88	99	99	76	82	83	74	
Women															
<b>Study Hall</b>															
Men	.3097	.0926	32	19	16	15	15	15	15	15	14	13	13	11	
Women															
<b>Personnel Serving Secondary &amp; Elementary Schools (grades 1-12)</b>															
Exceptional Child Education	.3311	.1302	466	484	386	363	355	341	329	318	314	311	323	326	
Other Service Personnel	.3718	.1190	96	84	76	73	71	69	66	64	61	60	63	63	

A P P E N D I X II

COMPARISON OF NUMBER OF TEACHERS PRODUCED IN FLORIDA IN 1968 WITH THE NUMBER  
NEEDED TO STAFF PRESENT PROGRAMS FOR 1968-69 (SELECTED AREAS)<sup>1</sup>

APPENDIX II  
Table 1

	Projected Total Needs <sup>2</sup>	Projected No. of New Teachers Needed <sup>3</sup>	Number Prod. by Fla. Insti- tutions <sup>4</sup>	Deficit	Increase in Prod. Required to Meet Need	Status <sup>5</sup>
Regular Instruction, Elementary	25,856	4,507	2,417	2,090	86%	Crit. Short.
Art	754	136	127	9	7%	Adequate
Business Education	1,470	277	191	86	45%	Shortage
English	4,706	960	580	380	66%	Shortage
Foreign Language	1,098	234	139	95	68%	Shortage
Home Economics	1,051	200	122	78	64%	Shortage
Industrial Arts	861	156	100	56	56%	Shortage
Library Sciences	953	259	95	164	137%	Crit. Short.
Mathematics	3,547	726	253	473	187%	Crit. Short.
Music	1,617	287	180	107	59%	Shortage
Phy. Ed. Men	1,708	253	245	8	3%	Adequate
Phy. Ed. Women	1,572	294	132	162	122%	Crit. Short.
Biology	716	147	116	31	27%	Shortage
Other Sciences	2,358	430	53	377	711%	Crit. Short.
Social Studies	3,463	647	731	None	0%	Adequate
Special Education	1,903	386	163	223	137%	Crit. Short.
Guidance & Counseling	1,397	209	216	None	0%	Adequate
Vocational-Technical	885	111	5	106	222%	Crit. Short.
Agriculture	289	47	19	28	147%	Shortage

<sup>1</sup>This table was prepared in the Division of Teacher Education, Certification and Accreditation, Florida State Department of Education, in July 1968, by K. Fred Daniel.

<sup>2</sup>Includes both new and returning teachers. Data are taken from "Projections of Personnel Needed to Maintain Present Programs in Florida Public Schools, 1969-78."

<sup>3</sup>Includes both additions and replacements.

<sup>4</sup>Information from reports submitted to the State Department of Education by teacher education institutions, December, 1967.

<sup>5</sup>Descriptions of status are based on the amount of increase in production which would be required to meet projected needs for the 1968 school year: (a) if the required increase is less than 10% the supply is labeled "adequate," (b) if required increase is from 10% to 25% the label is "low supply," (c) from 26% to 70% is "shortage," and (d) if the required increase is greater than 70% the label is "critical shortage."

COMPARISON OF TEACHERS PRODUCED BY FLORIDA  
INSTITUTIONS WITH THE NUMBER OF TEACHERS  
NEEDED TO STAFF FLORIDA SCHOOLS

APPENDIX II  
Table 2

1968-69 Summary

CATEGORY	TEACHERS PRODUCED <sup>9</sup>							NUMBER EXPECTED TO TEACH IN FLORIDA <sup>3</sup>	NEW TEACHERS NEEDED				POTENTIAL PRODUCTION OF INSTITUTIONS	
	PUBLIC			PRIVATE			No. Needed	TO MAINTAIN PRESENT PROGRAM		No. Needed	FOR RECOMMENDED PROGRAMS			
	AB	MA	OTHER	AB	MA	OTHER		No. Deficit	Deficit		Deficit	Deficit		
<b>ELEMENTARY</b>														
Principals, Directors and Coordinators			12			11	87		159				245	
Resource and Supervisory Teachers			15			25	40		27				87	
Regular Instruction	1458	301	30	608	20		2417	1595	4603	3008	10,993	9,398	2419	
<b>SECONDARY</b>														
Principals and Coordinators		181	25			21	227		176				233	
Curriculum Assistant and Helping Teachers						6	6		27				42	
Agriculture	7	12					19	19	47	28	47 <sup>2</sup>	28	55	
Art	66	7	2	32			127	64	146	82	146 <sup>2</sup>	82	228	
Business Education	114	13	5	75	2		209	126	277	151	277 <sup>2</sup>	151	205	
English and Journalism	428	11	5	130	16		590	350	960	610	1231 <sup>1</sup>	883	696	
Speech and Dramatic Arts	73	1		17	1		92	39	68	29	68 <sup>2</sup>	29	158	
Foreign Language	79	2	4	52	2		139	81	234	153	234 <sup>2</sup>	153	312	
Health and Safety	14						14	8	30	22	43 <sup>1</sup>	35	16	
Home Economics	100	3		10			122	64	200	136	200 <sup>2</sup>	136	178	
Industrial Arts	68	3	2	27			100	38	156	118	156 <sup>2</sup>	118	208	
Junior High School (general)				2			2	1	22	21	22 <sup>2</sup>	21	30	
Mathematics	186	24		39	4		253	154	726	572	1155 <sup>2</sup>	1001	290	
Music <sup>6</sup>	134	9		36	1		180	84	287	203	475	391	333	
Physical Education (Men) <sup>6</sup>	158	6	2	79			245	114	234	120			320	
Physical Education (Women) <sup>6</sup>	88	5		39			132	67	271	204			180	
Natural and Physical Sciences									42		42 <sup>2</sup>			
General Science	15	2	5	8	2		21	19	339	320	748 <sup>1</sup>	729	42	
Biology	77	3	12	24			116	68	147	70	209 <sup>1</sup>	141	212	
Chemistry	17			2	1		20	11	66	55	66 <sup>2</sup>	55	105	
Physics	4		1				5	3	25	22	25 <sup>2</sup>	22	52	
Social Studies	424	37	5	246	19		731	402	647	245	1330 <sup>1</sup>	928	866	
Trade, Industrial, and Technical	3		2				5	3	11	108	111 <sup>2</sup>	108	60	
Elementary and Secondary														
Special Education	85	17	30	21		10	163	79	386	307	2476 <sup>1</sup>	2397	131	
Librarian	69	11	3				12	95	66	259	193		103	
Guidance Personnel		117	68			33	218		209		1933 <sup>4</sup>		279	
Others	23			1		5	29	17 <sup>5</sup>	76	61			68	

<sup>1</sup>Number needed to have 1-25 teacher-pupil ratio if present ratio is higher than 1-25.

<sup>2</sup>Present teacher-pupil ratio is not greater than 1-25.

<sup>3</sup>Based on proportion of 1966 Florida teacher education graduates who entered teaching in 1966-67 in Florida except where otherwise indicated.

<sup>4</sup>Based on a ratio of 1-500 at the elementary level and a ratio of 1-375 at the secondary level.

<sup>5</sup>Based on an overall average ratio of .590.

<sup>6</sup>Includes teachers teaching this subject at the elementary level.

<sup>8</sup>The surplus or deficit is calculated by subtracting "Number needed" from "Number expected to teach in Florida".

<sup>9</sup>The number of teachers produced are based upon reports submitted to the State Department of Education by teacher education institutions in December 1967.

NOTE: No figures are included where standards for recommended programs have not been developed.

APPENDIX II  
Table 3

Projections of Kindergarten Teachers Needed to Staff Florida Schools<sup>1</sup>

<u>Year</u>	<u>Estimated Number of 5-year-old Children</u>	<u>No. of Teachers Needed (1-25 Ratio)</u>	<u>No. of Teachers Expected to be Employed<sup>2</sup></u>	<u>Number of New Teachers<sup>3</sup></u>
1967-68	122,441	4897	665	
1968-69	122,073	4883	1326	744
1969-70	121,261	4850	1938	777
1970-71	113,428	4537	2550	954
1971-72	109,542	4382	3162	1047
1972-73	106,398	4256	3774	1125
1973-74	109,647	4386	4386	1182
1974-75	112,897	4491	4491	763
1975-76	116,145	4646	4646	740
1976-77	119,395	4776	4776	726
1977-78	123,670	4946	4946	766

<sup>1</sup>These projections were prepared in the Division of Teacher Education, Certification and Accreditation, Florida State Department of Education, in July 1968 by K. Fred Daniel.

<sup>2</sup>This column represents the number of teachers expected to be employed if 661 units beyond the 1967-68 level are added in 1968-69 and if the number of teachers is increased at an even rate so that all eligible children are served in 1973-74. (This program was prescribed by the first 1968 Special Session of the Florida Legislature.)

<sup>3</sup>This column includes the number of teachers needed for additions and replacements (based upon the following dropout rates: .2942 for first year teachers and .0969 for returning teachers).

**Table 4**  
**PROJECTIONS OF TEACHERS OF EXCEPTIONAL CHILDREN  
 NEEDED TO STAFF FLORIDA SCHOOLS<sup>1</sup>**

**APPENDIX II**

Year	Total Enrollment 1-12 <sup>2</sup>	Number Teachers Needed to Serve All Eligible Pupils <sup>3</sup>	Number of Teachers Expected to be Employed <sup>4</sup>	New Teachers <sup>5</sup>
1968-69	1,323,057	4070	2356	839
1969-70	1,349,267	4151	2731	867
1970-71	1,369,338	4213	3107	919
1971-72	1,378,775	4242	3482	977
1972-73	1,380,167	4246	3858	1037
1973-74	1,375,793	4233	4233	1097
1974-75	1,376,795	4236	4236	804
1975-76	1,364,684	4199	4199	671
1976-77	1,361,752	4190	4190	660
1977-78	1,359,479	4183	4183	658

<sup>1</sup>These projections were prepared in the Division of Teacher Education, Certification and Accreditation, Florida State Department of Education by K. Fred Daniel, in July, 1968.

<sup>2</sup>Projected enrollment at the end of the first month of school.

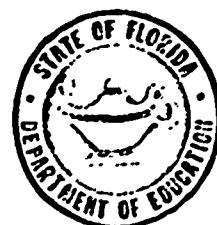
<sup>3</sup>Number of teachers needed for a 1-375 ratio (the number needed to provide the necessary services based on prevalence rates).

<sup>4</sup>This column represents the number of teachers expected to be employed if 500 units beyond the 1967-68 figures are added in 1968-69 and if the number of teachers is increased at an even rate until all eligible children are served by 1973-74. (This program was prescribed by the first 1968 Special Session of the Florida Legislature).

<sup>5</sup>This column includes the number of teachers needed for additions and replacements (based upon the following dropout rates: .3718 for first year teachers, .1190 for other teachers).

**NEW TEACHERS IN FLORIDA PUBLIC SCHOOLS  
1965-66, 1966-67, & 1967-68**

**Tabulations By Re-Entry Status, Certifi-  
cate Rank, State Of Graduation & Florida  
Institution Of Graduation**



**State of Florida  
Department of Education  
Floyd T. Christian, Superintendent  
June 17, 1968**

This report was prepared in the Division of Teacher Education,  
Certification, and Accreditation by K. Fred Daniel. Copies are  
available on request.

NEW TEACHERS IN FLORIDA PUBLIC SCHOOLS--1965-66, 1966-67, & 1967-68<sup>1</sup>

TABLE 1.--Re-Entry Status and Certificate Rank of Personnel Assigned to Florida Public Schools in 1965-66 Who Were Not Assigned to Florida Public Schools in 1964-65

	No.	Rank 1 No. %	Rank 2 No. %	No.	Rank 3 No. %	No.	Rank 4, 5, 6 No. %	No.	TOTALS %	
Re-Entries <sup>2</sup>	12	63.16	556	41.62	1233	15.05	14	10.53	1815	18.76
New to Florida Schools	7	36.84	780	58.38	6960	84.95	119	89.47	7866	81.24
TOTALS	19	100.00	1336	100.00	8193	100.00	133	100.00	9681	100.00

TABLE 2.--Re-Entry Status and Certificate Rank of Personnel Assigned to Florida Public Schools in 1966-67 Who Were Not Assigned to Florida Public Schools in 1965-66

	No.	Rank 1 No. %	Rank 2 No. %	No.	Rank 3 No. %	No.	Rank 4, 5, 6 No. %	No.	TOTALS %	
Re-Entries <sup>3</sup>	14	66.67	553	39.25	1346	13.98	19	6.96	1932	17.06
New to Florida Schools	7	33.33	856	60.75	8279	86.02	254	93.04	9396	82.94
TOTALS	21	100.00	1409	100.00	9625	100.00	273	100.00	11328	100.00

<sup>1</sup>Persons included in these tables were identified using School Accreditation reports for 1964-65, 1965-66, 1966-67, and 1967-68. Certificate rank, state of graduation, and Florida institution were obtained from Certification records. Prior service status was identified using Florida Teacher Retirement Service records.

<sup>2</sup>Persons tabulated as re-entries had Florida service recorded to their records for some period during the years 1939-64.

<sup>3</sup>Persons tabulated as re-entries had Florida service recorded to their records for some period during the years 1939-65.

TABLE 3.--Re-Entry Status and Certificate Rank of Personnel Assigned to Florida Public Schools in 1967-68 Who Were Not Assigned to Florida Public Schools in 1966-67

	No.	Rank 1 %	No.	Rank 2 %	No.	Rank 3 %	No.	Ranks 4, 5, 6 %	No.	TOTALS %
Re-Entries <sup>4</sup>	3	21.43	795	55.40	6864	76.19	150	74.26	7812	73.28
New to Florida Schools	11	78.57	640	44.60	2145	23.81	52	25.74	2848	26.72
TOTALS	14	100.00	1435	100.00	9009	100.00	202	100.00	10660	100.00

<sup>4</sup>Persons tabulated as re-entries had Florida service recorded to their records for some period during the years 1953-66.

TABLE 4.--State of Graduation (Highest Degree) and Certificate Rank of Personnel Assigned to Florida Public Schools for the First Time in 1965-66<sup>1</sup>

	No.	Rank 1 %	No.	Rank 2 %	No.	Rank 3 %	No.	Ranks 4, 5, 6 %	No.	TOTALS %
Alabama	0	0	46	5.90	467	6.71	0	0	513	6.52
Arizona	0	0	6	.77	5	.07	0	0	11	.14
Arkansas	0	0	5	.64	58	.83	0	0	63	.80
California	0	0	3	.38	30	.43	0	0	33	.42
Colorado	0	0	6	.77	18	.26	0	0	24	.31
Connecticut	0	0	8	1.03	23	.33	0	0	31	.39
Delaware	0	0	2	.26	3	.04	0	0	5	.06
Florida	4	57.14	186	23.85	3037	43.64	1	.84	3228	41.04
Georgia	0	0	13	1.67	287	4.12	0	0	300	3.81
Idaho	1	14.29	0	0	5	.07	0	0	6	.08
Illinois	0	0	30	3.65	114	1.64	0	0	144	1.83
Indiana	0	0	26	3.33	82	1.18	0	0	108	1.37
Iowa	0	0	4	.51	21	.30	0	0	25	.32
Kansas	0	0	0	0	30	.43	0	0	30	.33
Kentucky	0	0	38	4.87	190	2.73	0	0	228	2.90
Louisiana	0	0	9	1.15	77	1.11	0	0	86	1.09
Maine	0	0	0	0	16	.23	0	0	16	.20
Maryland	0	0	9	1.15	27	.39	0	0	36	.46
Massachusetts	0	0	15	1.92	53	.76	0	0	68	.66
Michigan	0	0	20	2.56	81	1.16	0	0	101	1.28
Minnesota	0	0	1	.13	30	.45	0	0	31	.39
Mississippi	1	14.29	30	3.85	261	3.75	0	0	292	3.71
Missouri	0	0	9	1.15	39	.56	0	0	48	.61

<sup>1</sup>Persons represented in Table 4 had no service recorded for the years 1939-64.

TABLE 4.--State of Graduation (Highest Degree) and Certificate Rank of Personnel Assigned to Florida Public Schools for the First Time in 1965-66 (Con't)

	No.	Rank 1 %	No.	Rank 2 %	No.	Rank 3 %	No.	Rank 4, 5, 6 %	No.	TOTALS No.	%
Montana	0	0	0	0	0	5	.07	0	0	5	.06
Nebraska	0	0	0	3	.38	11	.16	0	0	14	.18
Nevada	0	0	0	0	0	0	0	0	0	0	0
New Hampshire	0	0	1	.13	8	.11	0	0	0	9	.11
New Jersey	0	0	5	.64	32	.46	0	0	0	37	.47
New Mexico	0	0	2	.26	7	.10	0	0	0	9	.11
New York	0	0	69	8.85	120	1.72	0	0	0	189	2.40
North Carolina	0	0	35	4.49	283	4.07	0	0	0	318	4.04
North Dakota	0	0	1	.13	8	.11	0	0	0	9	.11
Ohio	1	14.29	38	4.87	191	2.74	0	0	0	230	2.92
Oklahoma	0	0	0	7	.90	41	.59	0	0	48	.61
Oregon	0	0	0	.13	6	.09	0	0	0	7	.09
Pennsylvania	0	0	27	3.46	151	2.17	0	0	0	178	2.26
Rhode Island	0	0	0	1	.13	11	.16	0	0	12	.15
South Carolina	0	0	1	.13	155	2.23	0	0	0	156	2.98
South Dakota	0	0	2	.26	3	.04	0	0	0	5	.06
Tennessee	0	0	58	7.44	401	5.76	0	0	0	459	5.84
Texas	0	0	17	2.18	91	1.31	0	0	0	108	1.37
Utah	0	0	1	.13	9	.13	0	0	0	10	.13
Vermont	0	0	0	2	.26	7	.10	0	0	9	.11
Virginia	0	0	0	3	.28	65	.93	0	0	68	.86
Washington	0	0	0	1	.13	9	.13	0	0	10	.13
West Virginia	0	0	0	17	2.18	142	2.04	0	0	159	2.02
Wisconsin	0	0	6	.77	31	.45	0	0	0	37	.47
Wyoming	0	0	0	0	0	0	0	0	0	0	0

TABLE 4. --State of Graduation (Highest Degree) and Certificate Rank of Personnel Assigned to Florida Public Schools for the First Time in 1965-66

	Rank 1		Rank 2		Rank 3		Rank 4, 5, 6		TOTALS	
	No.	%	No.	%	No.	%	No.	%	No.	%
District of Columbia	0	0	8	1.03	14	.20	0	0	22	.28
Alaska	0	0	0	0	1	.01	0	0	1	.01
Hawaii	0	0	0	0	2	.03	0	0	2	.03
Foreign	0	0	3	.38	53	.76	0	0	56	.71
State of Graduation not listed	0	0	5	.64	149	2.14	118	99.16	272	3.46
<b>TOTALS</b>	<b>7</b>	<b>100.00</b>	<b>780</b>	<b>100.00</b>	<b>6960</b>	<b>100.00</b>	<b>119</b>	<b>100.00</b>	<b>7866</b>	<b>100.00</b>

TABLE 5.—State of Graduation (Highest Degree) and Certificate Rank of Personnel  
Assigned to Florida Public Schools for the First Time in 1966-67<sup>1</sup>

	No.	Rank 1 %	No.	Rank 2 %	No.	Rank 3 %	No.	Ranks 4, 5, 6 %	No.	TOTALS %
Alabama	1	14.29	29	3.39	535	6.47	0	0	566	6.02
Arizona	0	0	5	.35	10	.12	0	0	15	.14
Arkansas	0	0	5	.53	72	.87	0	0	77	.82
California	1	14.29	10	1.17	41	.50	0	0	52	.55
Colorado	1	14.29	4	.47	22	.27	0	0	27	.29
Connecticut	0	0	8	.93	27	.33	0	0	35	.37
Delaware	0	0	0	0	4	.05	0	0	4	.04
Florida	1	14.29	200	23.36	3587	43.32	1	.39	3789	40.33
Georgia	0	0	30	3.50	357	4.31	0	0	367	4.12
Idaho	0	0	0	0	3	.04	0	0	3	.03
Illinois	0	0	41	4.79	123	1.49	0	0	164	1.75
Indiana	0	0	38	4.44	150	1.81	0	0	183	2.00
Iowa	0	0	3	.35	45	.54	0	0	43	.51
Kansas	0	0	5	.58	29	.35	0	0	34	.36
Kentucky	0	0	33	3.86	199	2.40	0	0	232	2.47
Louisiana	0	0	16	1.87	120	1.45	0	0	136	1.45
Maine	0	0	1	.12	21	.25	0	0	22	.23
Maryland	0	0	8	.93	44	.53	0	0	52	.55
Massachusetts	0	0	22	2.57	37	1.05	0	0	109	1.16
Michigan	0	0	32	3.74	113	1.36	0	0	145	1.54
Minnesota	0	0	5	.58	36	.43	0	0	44	.44
Mississippi	0	0	22	2.57	296	3.52	0	0	318	3.53
Missouri	0	0	5	.58	63	.76	0	0	68	.72

<sup>1</sup>Persons represented in Table 5 had no service recorded for the years 1939-65.

TABLE 5.—State of Graduation (Highest Degree) and Certificate Rank of Personnel  
Assigned to Florida Public Schools for the First Time in 1966-67 (Con't)

	Rank 1 No.	Rank 1 %	No.	Rank 2 %	No.	Rank 3 %	No.	Ranks 4, 5, 6 %	No.	TOTALS %
Montana	0	0	0	0	0	0	.07	0	0	.06
Nebraska	0	0	5	.58	26	.31	0	0	31	.32
Nevada	0	0	0	0	0	0	0	0	0	0
New Hampshire	0	0	1	.12	11	.13	0	0	12	.13
New Jersey	0	0	17	1.99	58	.70	0	0	75	.80
New Mexico	0	0	4	.47	10	.12	0	0	14	.15
New York	0	0	59	6.89	206	2.49	0	0	265	2.82
North Carolina	0	0	38	4.44	328	3.96	0	0	366	3.90
North Dakota	0	0	0	0	9	.11	0	0	9	.10
Ohio	0	0	46	5.37	228	2.75	0	0	274	2.92
Oklahoma	0	0	0	8	.93	.56	0	0	64	.68
Oregon	0	0	3	.35	4	.05	0	0	7	.07
Pennsylvania	0	0	25	2.92	194	2.34	0	0	219	2.33
Rhode Island	0	0	1	.12	14	.17	0	0	15	.16
South Carolina	1	14.29	8	.93	161	2.94	0	0	170	1.81
South Dakota	0	0	0	0	6	.07	0	0	6	.06
Tennessee	0	0	48	5.61	445	5.38	0	0	493	5.25
Texas	1	14.29	19	2.22	127	1.53	0	0	147	1.56
Utah	0	0	3	.35	9	.11	0	0	12	.13
Vermont	0	0	2	.23	11	.13	0	0	13	.14
Virginia	0	0	13	1.52	74	.89	0	0	87	.93
Washington	0	0	1	.12	10	.12	0	0	11	.12
West Virginia	0	0	15	1.75	93	1.12	0	0	103	1.15
Wisconsin	0	0	2	.23	43	.48	0	0	42	.45
Wyoming	0	0	0	0	0	0	0	0	0	.03

TABLE 5.--State of Graduation (Highest Degree) and Certificate Rank of Personnel  
Assigned to Florida Public Schools for the First Time in 1966-67

	Rank 1		Rank 2		Rank 3		Rank 4, 5, 6		TOTALS	
	No.	%	No.	%	No.	%	No.	%	No.	%
District of Columbia	0	0	6	.70	14	.17	0	0	20	.21
Alaska	0	0	1	.12	0	0	0	0	1	.01
Hawaii	0	0	0	0	2	.02	0	0	2	.02
Foreign	0	0	1	.12	44	.53	0	0	45	.48
State of Graduation not listed	1	14.29	10	1.17	105	1.27	253	99.61	369	3.93
TOTALS	7	100.00	856	100.00	8279	100.00	254	100.00	9396	100.00

TABLE 6.—State of Graduation (Highest Degree) and Certificate Rank of Personnel Assigned to Florida Public Schools for the First Time in 1967-68<sup>1</sup>

	No.	Rank 1 %	No.	Rank 2 %	No.	Rank 3 %	No.	Ranks 4, 5, 6 %	No.	TOTALS %
Alabama	0	0	24	3.02	347	5.06	0	0	371	4.75
Arizona	0	0	5	.63	12	.17	0	0	17	.22
Arkansas	0	0	8	1.01	39	.57	0	0	47	.60
California	0	0	6	.75	36	.52	0	0	42	.54
Colorado	0	0	2	.25	17	.25	0	0	19	.24
Connecticut	0	0	9	1.13	24	.35	0	0	33	.42
Delaware	0	0	1	.13	5	.07	0	0	6	.08
Florida	1	33.33	195	24.53	3072	44.76	0	0	3268	41.83
Georgia	0	0	16	2.01	268	3.90	0	0	284	3.64
Idaho	0	0	0	0	6	.09	0	0	6	.08
Illinois	0	0	39	4.91	114	1.66	0	0	153	1.96
Indiana	0	0	55	6.92	125	1.82	0	0	180	2.30
Iowa	0	0	4	.50	40	.58	0	0	44	.56
Kansas	0	0	5	.63	28	.41	0	0	33	.42
Kentucky	0	0	32	4.03	190	2.77	0	0	222	2.84
Louisiana	0	0	12	1.51	82	1.19	0	0	94	1.20
Maine	0	0	2	.25	11	.16	0	0	13	.17
Maryland	0	0	2	.25	24	.35	0	0	26	.33
Massachusetts	0	0	27	3.40	65	.95	0	0	92	1.18
Michigan	0	0	24	3.02	120	1.75	0	0	144	1.84
Minnesota	0	0	2	.25	42	.61	0	0	44	.56
Mississippi	0	0	18	2.26	280	4.08	0	0	298	3.81
Missouri	1	33.33	11	1.38	56	.82	0	0	68	.87

<sup>1</sup>Persons represented in Table 6 had no service recorded for the years 1953-66.

TABLE 6.--State of Graduation (Highest Degree) and Certificate Rank of Personnel  
Assigned to Florida Public Schools for the First Time in 1967-68 (Con't)

	Rank 1 No.	Rank 1 %	Rank 2 No.	Rank 2 %	Rank 3 No.	Rank 3 %	Ranks 4, 5, 6 No.	Ranks 4, 5, 6 %	TOTALS No.	TOTALS %
Montana	0	0	0	0	6	.09	0	0	6	.08
Nebraska	0	0	2	.25	16	.23	0	0	18	.23
Nevada	0	0	0	0	1	.01	0	0	1	.01
New Hampshire	0	0	0	0	15	.22	0	0	15	.19
New Jersey	0	0	10	1.26	46	.67	0	0	56	.72
New Mexico	0	0	3	.38	6	.09	0	0	9	.12
New York	0	0	69	8.68	182	2.65	0	0	251	3.21
North Carolina	0	0	30	3.77	228	3.32	0	0	258	3.30
North Dakota	0	0	0	0	5	.07	0	0	5	.06
Ohio	0	0	39	3.77	214	3.12	0	0	244	3.12
Oklahoma	0	0	10	1.26	33	.48	0	0	43	.55
Oregon	0	0	3	.38	6	.09	0	0	9	.12
Pennsylvania	0	0	30	3.77	161	2.35	0	0	191	2.44
Rhode Island	0	0	2	.25	8	.12	0	0	10	.13
South Carolina	0	0	3	.38	137	2.09	0	0	140	1.79
South Dakota	0	0	1	.13	5	.07	0	0	6	.08
Tennessee	1	33.33	41	5.16	290	4.22	0	0	332	4.25
Texas	0	0	19	2.39	95	1.38	0	0	114	1.46
Utah	0	0	0	0	14	.20	0	0	14	.18
Vermont	0	0	1	.13	10	.15	0	0	11	.14
Virginia	0	0	11	1.38	63	1.21	0	0	94	1.20
Washington	0	0	0	0	17	.25	0	0	17	.22
West Virginia	0	0	14	1.76	80	1.17	0	0	94	1.20
Wisconsin	0	0	8	1.01	47	.63	0	0	55	.70
Wyoming	0	0	1	.13	1	.01	0	0	2	.03

TABLE 6.—State of Graduation (Highest Degree) and Certificate Rank of Personnel  
Assigned to Florida Public Schools for the First Time in 1967-68

	Rank 1 No.	Rank 1 %	Rank 2 No.	Rank 2 %	Rank 3 No.	Rank 3 %	Rank 4, 5, 6 No.	Rank 4, 5, 6 %	TOTALS No. %
District of Columbia	0	0	4	.50	19	.23	0	0	23 .29
Alaska	0	0	0	0	1	.01	0	0	1 .01
Hawaii	0	0	0	0	3	.04	0	0	3 .04
Foreign State of Graduation	0	0	2	.25	41	.60	0	0	43 .55
not listed	0	0	2	.25	91	1.33	150	300.00	243 3.11
<b>TOTALS</b>	<b>3</b>	<b>100.00</b>	<b>795</b>	<b>100.00</b>	<b>6864</b>	<b>100.00</b>	<b>150</b>	<b>100.00</b>	<b>7812 100.00</b>

TABLE 7.-Florida Institution of Graduation (Highest Degree) and Certificate Rank of Personnel Assigned to Florida Public Schools for the First Time in 1965-66<sup>1</sup>

	No.	Rank 1 %	No.	Rank 2 %	No.	Rank 3 %	No.	Rank 4, 5, 6 %	No.	TOTALS %
Florida State University	2	50.00	63	33.87	755	24.86	0	0	820	25.40
University of Florida	2	50.00	61	32.80	463	15.25	0	0	526	16.29
Florida A & M University	0	0	10	5.38	370	12.18	0	0	330	11.77
University of Miami	0	0	21	11.29	308	10.14	0	0	329	10.19
Stetson University	0	0	3	1.61	110	3.62	0	0	113	3.50
Rollins College	0	0	13	6.99	47	1.55	0	0	60	1.86
University of Tampa	0	0	0	0	97	3.19	0	0	97	3.02
Florida Southern University	0	0	1	.54	131	4.31	0	0	132	4.09
Barry College	0	0	3	1.61	32	1.05	0	0	35	1.03
Bethune-Cookman College	0	0	0	0	138	4.54	0	0	138	4.28
Florida Memorial College	0	0	0	0	73	2.40	0	0	73	2.26
Jacksonville College of Music	0	0	0	0	1	.03	0	0	1	.03
Florida Christian College	0	0	0	0	0	0	0	0	0	0
Edward Walters College	0	0	0	0	103	3.39	1	100.00	104	3.22
Jacksonville University	0	0	1	.54	76	2.50	0	0	77	2.39
Southeastern Bible College	0	0	0	0	19	.63	0	0	19	.59
University of South Florida	0	0	1	.54	249	8.20	0	0	250	7.74
Florida Presbyterian College	0	0	0	0	11	.36	0	0	11	.34
Florida Atlantic University	0	0	9	4.84	49	1.61	0	0	58	1.80
Institution Not Identified	0	0	0	0	5	.16	0	0	5	.15
<b>TOTALS</b>	<b>4</b>	<b>100.00</b>	<b>186</b>	<b>100.00</b>	<b>3037</b>	<b>100.00</b>	<b>1</b>	<b>100.00</b>	<b>3223</b>	<b>100.00</b>

<sup>1</sup>Persons represented in Table 7 had no service recorded for the years 1939-64.

TABLE 8.—Florida Institution of Graduation (Highest Degree) and Certificate Rank of Personnel Assigned to Florida Public Schools for the First Time in 1966-67

	No.	Rank 1 %	No.	Rank 2 %	No.	Rank 3 %	No.	Rank 4,5, 6 %	No.	TOTALS %
Florida State University	0	100.00	0	4.5	22.50	829	23.11	0	0	874
University of Florida	1	100.00	68	34.00	506	14.11	0	0	0	575
Florida A & M University	0	0	9	4.50	344	9.59	0	0	0	353
University of Miami	0	0	18	9.00	406	11.37	0	0	0	426
Stetson University	0	0	8	4.00	100	2.79	0	0	0	103
Rollins College	0	0	9	4.50	49	1.37	0	0	0	58
University of Tampa	0	0	1	.50	113	3.15	0	0	0	114
Florida Southern University	0	0	1	.50	141	3.93	1	100.00	143	3.77
Barry College	0	0	7	3.50	42	1.17	0	0	0	49
Bethune-Cookman College	0	0	0	0	150	4.18	0	0	0	150
Florida Memorial College	0	0	0	0	76	2.12	0	0	0	76
Jacksonville College of Music	0	0	0	1	.03	0	0	0	1	.03
Florida Christian College	0	0	0	0	0	0	0	0	0	0
Edward Walters College	0	0	0	0	123	3.43	0	0	0	123
Jacksonville University	0	0	0	0	120	3.35	0	0	0	120
Southeastern Bible College	0	0	0	0	16	.45	0	0	0	16
University of South Florida	0	0	11	5.50	343	9.70	0	0	0	359
Florida Presbyterian College	0	0	0	0	10	.28	0	0	0	10
Florida Atlantic University	0	0	23	11.50	211	5.88	0	0	0	234
<b>TOTALS</b>	<b>1</b>	<b>100.00</b>	<b>200</b>	<b>100.00</b>	<b>3587</b>	<b>100.00</b>	<b>1</b>	<b>100.00</b>	<b>3789</b>	<b>100.00</b>

<sup>1</sup>Persons represented in Table 8 had no service recorded for the years 1939-65.

TABLE 9.—Florida Institution of Graduation (Highest Degree) and Certificate Rank of Personnel Assigned to Florida Public Schools for the First Time in 1967-68<sup>1</sup>

	Rank 1 No.	Rank 1 %	No.	Rank 2 No.	Rank 2 %	No.	Rank 3 No.	Rank 3 %	No.	Rank 4, 5, 6 No.	TOTALS %
Florida State University	0	0	32	16.41	737	23.99	0	0	0	769	23.53
University of Florida	1	100.00	81	41.55	446	14.52	0	0	0	523	16.16
Florida A & M University	0	0	1	.51	220	7.16	0	0	0	221	6.77
University of Miami	0	0	18	9.23	305	9.93	0	0	0	323	9.89
Sterling University	0	0	5	2.56	85	2.77	0	0	0	90	2.75
Rollins College	0	0	5	2.56	37	1.20	0	0	0	42	1.29
University of Tampa	0	0	0	0	96	3.12	0	0	0	96	2.94
Florida Southern University	0	0	0	0	105	3.42	0	0	0	105	3.21
Barry College	0	0	1	.51	32	1.04	0	0	0	33	1.01
Bethune-Cookman College	0	0	0	0	116	3.78	0	0	0	116	3.55
Florida Memorial College	0	0	0	0	70	2.28	0	0	0	70	2.14
Jacksonville College of Music	0	0	0	0	0	0	0	0	0	0	0
Florida Christian College	0	0	0	0	0	0	0	0	0	0	0
Edward Waters College	0	0	0	0	55	1.79	0	0	0	55	1.68
Jacksonville University	0	0	1	.51	86	2.80	0	0	0	67	2.66
Southeastern Bible College	0	0	0	0	23	.75	0	0	0	23	.70
University of South Florida	0	0	6	3.08	374	12.12	0	0	0	380	11.63
Florida Presbyterian College	0	0	0	0	6	.20	0	0	0	6	.18
Florida Atlantic University Institution Not Identified	0	0	45	23.08	273	8.89	0	0	0	313	9.73
	0	0	0	0	6	.19	0	0	0	6	.18
TOTALS	1	100.00	195	100.00	3072	100.00	0	0	0	3268	100.00

<sup>1</sup>Persons represented in Table 9 had no service recorded for the years 1953-66.

## **APPENDIX IV**

## APPENDIX V

### CONSULTANT'S COMMENTS ON REPORT OF THE ROLE AND SCOPE TASK FORCE ON TEACHER EDUCATION (TEACHER EDUCATION IN FLORIDA, 1968-1978)

Programs in teacher education comprise one of the largest single elements in the higher education system of the State of Florida. It is quite appropriate, therefore, that a report of the depth and magnitude of "The Role and Scope Task Force on Teacher Education" be undertaken and that careful reviews of such a report be conducted.

In the charge to the Role and Scope Task Force on Teacher Education, given by Vice Chancellor Allan Tucker in 1966, he summarized the basic areas for the consideration and action of the Task Force under four major headings:

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- (2) Suggestions for establishing inter-university cooperation,
- (3) Inventories of programs under way in teacher education,
- (4) Directions which teacher education might take over the next five years.

In the intervening three years the Task Force has produced an excellent and most comprehensive report on the role and scope of teacher education for the State of Florida.

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Those who developed the Task Force report are to be commended on the very careful analyses which have been developed in connection with

REPORT OF THE NEW SUPPLY OF INSTRUCTIONAL PERSONNEL  
FLORIDA PUBLIC INSTITUTIONS

Type of preparation completed by student	Number of students completing preparation for standard teaching certificates for the first time												Number of experienced certified teachers completing a new type of preparation		
	With a bachelor's degree			With a master's degree			1969 (estimated)			1968					
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total
	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
<b>1 ELEMENTARY SCHOOL</b>															
1 Regular instruction	134	1530	1664	106	1309	1415	20	110	130	17	98	115	-	89	
Selected subjects:															
2 Art	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3 Foreign languages	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4 Music	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5 Physical & health education	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>SECONDARY SCHOOL</b>															
6 Agriculture	18	-	18	15	-	15	1	-	1	1	-	1	-	1	
7 Art	26	74	100	24	61	85	4	7	11	12	8	10	-	-	
8 Business education	22	78	101	36	69	105	4	9	13	5	6	11	-	-	
9 Distributive education	5	1	6	4	1	5	2	-	2	2	1	3	-	-	
English language arts:															
10 English	71	278	349	71	278	349	4	20	24	5	16	21	-	2	
11 Journalism	4	25	29	4	22	26	-	-	-	-	-	-	-	-	
12 Speech and dramatic arts	19	56	75	15	40	55	-	-	-	-	-	-	-	-	
Foreign languages:															
13 French	3	30	33	2	26	28	1	1	2	1	-	1	-	-	
14 German	4	3	7	2	4	6	-	-	-	-	-	-	-	-	
15 Latin	-	1	1	1	3	4	-	-	-	-	-	-	-	-	
16 Russian	1	-	1	1	-	1	-	-	-	-	-	-	-	-	
17 Spanish	21	48	69	19	34	53	4	2	6	5	2	7	-	-	
18 Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
19 Home economics	-	92	92	-	13	93	-	-	-	-	-	-	-	-	
20 Industrial arts	45	-	45	42	-	42	-	-	-	-	-	-	-	-	
21 Junior high school (general)	3	1	4	-	-	-	-	-	-	-	-	-	-	-	
22 Mathematics	103	87	190	85	87	172	9	6	15	10	8	18	-	1	
23 Music	77	72	149	70	72	142	3	5	8	2	3	5	-	-	
24 Physical & health education	234	118	352	177	113	290	18	6	24	20	-	20	-	-	
Sciences:															
25 Subject not specified	7	10	17	2	2	4	-	-	-	-	-	-	-	-	
26 General science	12	3	15	7	5	12	9	7	16	8	8	16	-	3	
27 Biology	38	35	73	32	34	66	-	1	1	-	1	1	-	-	
28 Chemistry	15	3	18	13	4	17	-	-	-	-	-	-	-	-	
29 Physics	3	-	3	4	1	5	1	-	1	1	-	1	-	-	
Social studies:															
30 Subject not specified	214	127	341	190	120	319	21	8	29	15	7	22	-	-	
31 History, geography	47	13	60	8	11	19	1	1	2	1	1	2	-	-	
32 Economics, sociology, psychology	71	87	158	26	47	73	-	-	-	-	-	-	-	-	
33 Other social studies	38	8	46	23	4	32	-	-	-	-	-	-	-	-	
34 Trade, industrial, technical	11	-	11	15	-	15	-	-	-	-	-	-	-	-	
35 Other secondary subjects <sup>a/</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>UNGRADED</b>															
36 Special education	11	101	112	21	102	123	11	30	41	10	27	37	-	10	
37 Librarian	6	76	82	4	60	64	2	2	4	2	2	4	-	4	
38 Guidance counselor	-	-	-	-	-	-	57	62	119	52	56	108	-	94	
39 School psychologist	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
40 School social worker	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
41 School nurse	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
42 Other ungraded <sup>a/</sup>	-	-	-	-	-	-	-	3	3	-	3	3	-	4	
<b>TOTALS</b>	1264	2952	4221	1933	2602	3635	172	280	452	159	247	406		208	

REPORT OF THE NEW SUPPLY OF INSTRUCTIONAL PERSONNEL  
FLORIDA COMPOSITE

Type of preparation completed by student	Number of students completing preparation for standard teaching certificates for the first time													Number of experienced certified teachers completing a new type of preparation				
	With a bachelor's degree			With a master's degree <sup>a</sup>														
	1969 (estimated)			1968			1969 (estimated)			1968								
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	1969	1968				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15				
ELEMENTARY SCHOOL																		
1 Regular instruction	177	2003	2270	150	1011	2061	33	178	211	29	15 <sup>c</sup>	184	-	89				
Selected subjects:																		
2 Art	4	15	19	3	8	11	-	-	-	-	-	-	-	-	-	-		
3 Foreign languages	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
4 Music	8	13	21	-	3	3	-	-	-	-	-	-	-	-	-	-		
5 Physical & health education	19	11	30	18	7	25	-	-	-	-	-	-	-	-	-	-		
SECONDARY SCHOOL																		
6 Agriculture	18	-	18	15	-	15	1	-	1	1	-	1	-	1				
7 Art	30	92	122	30	85	115	4	7	11	3	8	11	-	-	-	-		
8 Business education	30	122	152	45	94	139	5	9	14	5	7	12	-	-	-	-		
9 Distributive education	5	1	6	4	1	5	2	-	2	2	1	3	-	-	-	-		
English language arts:																		
10 English	99	417	516	95	361	456	11	42	53	13	39	52	-	2				
11 Journalism	4	25	29	4	22	26	-	-	-	-	-	-	-	-	-	-		
12 Speech and dramatic arts	24	67	91	19	54	73	-	-	-	-	-	-	-	-	-	-		
Foreign languages:																		
13 French	3	51	54	4	34	38	1	1	2	1	-	1	-	-	-	-		
14 German	4	5	9	2	7	9	-	1	1	-	1	1	-	-	-	-		
15 Latin	-	2	2	1	4	5	-	-	-	-	-	-	-	-	-	-		
16 Russian	1	1	2	2	-	2	-	-	-	-	-	-	-	-	-	-		
17 Spanish	25	81	106	21	57	78	4	5	9	6	4	10	-	-	-	-		
18 Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
19 Home economics	-	102	102	-	103	103	-	-	-	-	-	-	-	-	-	-		
20 Industrial arts	56	-	56	66	-	66	-	-	-	-	-	-	-	-	-	-		
21 Junior high school (general)	3	1	4	1	2	3	-	-	-	-	-	-	-	-	-	-		
22 Mathematics	123	106	229	99	104	203	17	10	27	20	12	32	-	1				
23 Music	103	103	206	91	98	189	4	8	12	3	3	6	-	-	-	-		
24 Physician & health education	298	157	455	242	135	377	18	6	24	20	-	20	-	-	-	-		
Sciences:																		
25 Subject not specified	7	10	17	2	2	4	-	-	-	-	-	-	-	-	-	-		
26 General science	14	7	21	12	8	20	9	7	16	8	8	16	-	3				
27 Biology	49	56	105	44	39	83	-	1	1	1	1	2	-	-	-	-		
28 Chemistry	17	3	20	14	6	20	-	-	-	-	-	-	-	-	-	-		
29 Physics	3	1	4	5	1	6	1	-	1	1	-	1	-	-	-	-		
Social studies:																		
30 Subject not specified	298	195	494	259	166	425	30	15	45	21	15	36	-	-	-	-		
31 History, geography	71	36	107	26	35	61	11	5	16	17	3	20	-	-	-	-		
32 Economics, sociology, psychology	74	91	165	27	52	79	-	-	-	-	-	-	-	-	-	-		
33 Other social studies	39	9	48	28	4	32	-	-	-	-	-	-	-	-	-	-		
34 Trade, industrial, technical	11	-	11	15	-	15	-	-	-	-	-	-	-	-	-	-		
35 Other secondary subjects <sup>a/b</sup>	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-	-		
UNGRADED																		
36 Special education	16	127	143	23	120	143	14	38	52	12	33	45	6	16				
37 Librarian	6	77	83	4	61	65	2	2	4	2	2	4	10	14				
38 Guidance counselor	-	-	-	-	-	-	58	63	121	59	63	122	80	194				
39 School psychologist	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
40 School social worker	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
41 School nurse	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
42 Other ungraded <sup>a/b</sup> (reading)	-	-	-	-	-	-	-	3	3	2	4	6	21	39				
TOTALS	1640	4077	5717	1371	3584	4955	225	401	626	226	360	586	117	359				

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In the intervening three years the Task Force has produced an excellent and most comprehensive report on the role and scope of teacher education for the State of Florida.

#### Future Demand and Supply

Those who developed the Task Force report are to be commended on the very careful analyses which have been developed in connection with

teacher demand and supply. Certainly the figures on present status are most accurate and correspond closely to reports available from other sources; however, making projections and predictions for the future seems to remain a somewhat inexact practice even though in a collective, global sense we have available more of the resources helpful in prognosticating than ever before. Perhaps those engaged in "predicting things to come" in past years had a better chance of being accurate than do the prognosticators of today because of the relatively slow pace of change in past years. Such a disclaimer as that just stated seems desirable because no matter how complete the data and no matter how carefully analyses have been made, projections are always subject to change.

Even though the figures set forth in the Task Force report in connection with teachers needed to staff the schools of Florida in the coming years seem to be reasonably accurate, there are differing points of view. For example, in an assessment of manpower for elementary, secondary, higher, and special education fields required in connection with the Education Professions Development Act of 1967, the U. S. Office of Education predicts that the nation's shortage of teachers by 1975 "will disappear." The current shortage of about a half-million teachers will decline as the effect of the post-World War II "baby boom" on school enrollment declines, according to the study. The study predicts that if current trends continue, there will be an estimated 2.2 million new teachers to fill 1.6 million positions by 1975. Therefore, the projections made in the Task Force report when considered in national terms may be high.

It is significant to note, however, that the U. S. Office of Education report indicates that the need for highly specialized staff qualified to teach poor children, youngsters with mental and physical handicaps and students who will not go to college will remain critical.

Having commented on the national scene it should be pointed out that Florida may well serve as a special case, for the population of this state may continue to advance at a much more rapid pace than the nation as a whole and while the teacher shortage of the nation may be met in 1975, teachers for elementary and secondary schools in Florida will continue to be in short supply unless all efforts are expended to close the present gap between demand and supply.

One hypothesis related to teacher supply which seems to warrant additional investigation revolves about the question of Florida population by age groups. Florida has had two major-age-group-population growth patterns over the past several decades. First, there has been the "retirement age" growth, with relatively little concomitant pressure on the schools or the teacher supply-demand problem. On the other hand, there has been a sizable growth in the young adult, newly-married age group, thus creating a new wave of school population. Yet, at the same time this increase in the school-age population has been occurring, there has not been a corresponding growth in the college age (Florida resident) group. Consequently, the supply of Florida-based teachers has not increased as rapidly as has the school-age segment.

At the same time this situation has prevailed, the Florida public school teachers have been subject to a considerable amount of unrest

and turmoil and these problems have had an effect on the number of young people entering the teaching profession.

The point in this discussion is that as the present elementary and secondary school groups reach college age, there will be more individuals who have some "roots" in Florida, and if teaching conditions in the public schools improve during the coming few years, it seems reasonable to expect that a larger number of students will be entering the teacher preparation programs and Florida will more nearly meet the needs for teachers by virtue of its own supply rather than having to count on teachers imported from other states.

#### Inter-University Cooperation and Diversification of Effort

Almost every area in the charge presented by Dr. Tucker has been treated in real depth and with unusual objectivity. On the other hand, two of the major elements in the charge have not been faced as squarely and completely as may be desirable if necessary decisions in the near future are to be made wisely. Specifically, there are unanswered questions in connection with the ways in which inter-university cooperation can be developed and also in the direction that teacher education should take over the next five years. Lest these comments be interpreted as being overly critical of the Task Force report, it should be pointed out that certain procedures are already under way that may have persuaded the Task Force that no major deviations from present policies should be recommended.

For example, the "Criteria for Adding New Academic Programs" and the "Procedures for Preparing Proposals for New Graduate Programs,"

both employed currently by the State University System of Florida in the evaluation of proposed new graduate programs, are the soundest and most workable approaches that this observer has seen. The three emphases considered in assessing the need for new programs, including societal needs, student needs, and faculty need, are important elements in the application of the criteria that have been developed. In fact, the policy statements and procedures are so excellent that it would seem quite unwise to change these documents in any substantive way. Other states would profit immensely by adopting these or similar approaches to the problem of coordinating higher education programs, particularly in the graduate teacher education fields.

Although it might appear somewhat questionable to suggest that nine state-assisted universities within one state participate in the preparation of teachers at the undergraduate level and in certain aspects of graduate level preparation, in the State of Florida, such a procedure seems to be a necessity. The drastic shortage of teachers has been documented in the Task Force report and the fact that Florida has depended for a number of years upon teachers drawn from other states to fill its positions would indicate the need for a continuing supply of teachers prepared at the first professional degree level.

Master's degree programs in teacher education are so necessary to the educational pattern in Florida that no major general prohibitions on programs at that level would seem to be necessary or desirable. Perhaps there are several areas in which the Board of Regents will need to exercise controls in the coming decade and these might be cited in

order that institutions would not feel that they are completely free to move ahead in planning at the baccalaureate or master's degree levels. Such fields as vocational agriculture, home economics, distributive education, and various vocational-technical fields should be subject to some limitations as far as the number of institutions in which these programs are offered. The recommendations set forth in the report of the Task Force on Vocational-Technical Teacher Education (June 5, 1969) should serve as the basis for determining the institutions that should offer work in preparing teachers for vocational-technical education.

It would seem inadvisable to expand the number of institutions offering graduate programs in art, social studies, physical education for men, and guidance and counseling, since the available figures indicate no shortage of personnel in those areas. Rehabilitation sciences of a highly specialized nature should be limited to three or four institutions and these institutions should be selected with the availability of clinical material in mind.

The above statements should not be interpreted as advocating that the Board of Regents should discontinue reviews of applications for new programs at any levels. As already indicated, the plan of review which is now operative is one of the most effective in the nation and serves quite effectively in guaranteeing that an institution has the resources and the know-how to offer various programs which might be inaugurated in the future; therefore, every institution should be required to submit applications to the Board for review and approval prior to the beginning of programs in teacher education, and also in all other fields, for that matter.

### Post-Master's Degree Programs

The post-master's degree levels are not as easily handled, for specialist and doctoral degree programs are not only terrifically expensive, but they also require special attention in connection with the social need for such personnel as may be developed through the programs.

Currently there are two institutions in the state offering doctoral level work in the broad field of teacher education and related areas. Both the University of Florida and Florida State University are to be commended for the excellence of the programs now under way. It would be my recommendation that all of the present programs being offered by these institutions be continued. There would appear to be no reason that the doctoral program in elementary education approved for the University of South Florida should not be moved forward as rapidly as possible; however, to recommend that every institution move into doctoral level work in teacher education is something which would weaken the total structure of higher education in the State of Florida and would obviously result in programs of less than high quality level. From now until 1975, it is recommended that no additional institutions be considered for doctoral programs in teacher education.

It is quite conceivable, however, that between 1975 and 1980 the developments in the Boca Raton-Dade County area will be such that doctoral programs should be considered there. Even then, however, only one or the other of these universities should be designated for doctoral programs in teacher education, or if possible, a combined program at the doctoral level should be developed.

A decision to permit a number of institutions to enter costly new doctoral degree programs would mean that the state must find larger and larger sources of revenue to underwrite such programs or spread available money so thinly that not only existing programs but also new ones will be of lower quality. Dr. Allan Cartter, writing in the Southern Economic Journal in July, 1965, said: "Other regions of the nation, better endowed with outstanding universities, can afford the luxury of simultaneous growth in all their colleges and universities. The South, however, will dissipate its resources and continue to be a follower rather than a leader if it is not successful in establishing clear priorities."

On the question of establishing priorities it seems rather obvious that the State of Florida should follow the principle of limiting doctoral programs so that funds can be conserved and also in order that quality programs can be maintained and new programs of quality developed when really needed.

The above position does not appear to be inconsistent with the expressed opinion of the Task Force that teacher education must move toward qualitative improvement, for a shepherding of funds is necessary if the extra sums are to be available for the qualitatively improved programs.

At this stage in the development of graduate programs in teacher education, perhaps it is more important to emphasize the procedures employed in determining those institutions in which certain graduate pro-

grams should be developed than to focus on the institutions that should be selected. Over the long pull, the needs and demands will change, but if a sound procedure such as that now employed is continued, the state will be served well.

#### Research Efforts

Research in teacher education presents a multiplicity of problems, for one must give consideration to theoretical development in a variety of fields, to designs for determining the effectiveness of teacher preparation programs, to the evaluating of the effectiveness of teaching in the public school settings, and to a host of other factors. In addition, efforts must be made to disseminate the research findings in a more effective and understandable manner in order that research applications may be made as rapidly as possible.

In discussing the coordination of teacher education programs within the state, it seems appropriate to consider the manner in which "research and development" units would fit into this picture. The first sentence in Chapter IV of the Task Force report seems to present the key consideration of the report: "At the present time there is no systematic and comprehensive plan for the assessment of the adequacy and quality of teacher training programs and for revising current programs and planning future developments in any of the state universities or at the University-System level."

Theoretical research efforts, however, are inextricably bound to doctoral level programs; therefore, the same institutions already men-

tioned for inclusion in doctoral teacher education programs should be engaged in research in curricular and institutional problems and research and doctoral programs in administration and supervision should be even more restricted probably to University of Florida, Florida State University and the Miami-Dade institution (before 1975).

That section of the Task Force report dealing with research and the organizational pattern for research has been given very careful consideration in the process of this review. Obviously, it does not seem appropriate to suggest that each of the nine institutions be engaged in research in the field of teacher education and related areas. Research activities are not only extremely expensive, but they are time consuming and oftentimes sap the vitality of the instructional programs. Instead of every institution becoming deeply involved in research activities, it would seem desirable to consider the possibility of designating only those institutions that have special strengths in the areas of needed research and then developing effective means of disseminating such research findings on a wide-scale basis. There is a particular need for channeling the research to the potential users in the public schools in a form that is readily understood and usable. The Florida Educational Research and Development Council at the University of Florida may be the vehicle that should be given additional support from state funds to serve as a disseminating agency for research developed in the various institutions of the state, so far as teacher education is concerned.

The fundamental question seems to be one of how to proceed with a program of action to meet future needs. The report, probably because of internal political problems emanating from relationships among the universities, stresses the autonomy of the individual universities. Thus, on page 53 one wonders about the use of the word "massive" to describe the research programs proposed. Rather, it would seem better to use terms as "coordinated," "state-wide," "organizationally effective," etc. What is being suggested here is that we should focus on means which will have influence and yet will function in terms of general guidelines. It is doubtful that "several" research and development centers on different campuses will produce a coordinated, state-wide effect to solve the problems to which the report addresses itself.

Perhaps more important than anything else is the need to develop a system of coordination and review that will prevent unnecessary duplication of effort in research and will also assure that the needed areas of research find a "home" in some institution which has the requisite strengths to insure quality work. In the visits to the various institutions it was quite apparent that there is considerable fear of a "czar" of research.

In order that proper coordination may be developed in research, it is suggested that under the new administrative reorganization plan for the State of Florida, the State Commissioner of Education should establish a Teacher Education Research Council, composed of representatives of the various colleges of education and representatives of the school systems of the state. Through such a council, problems of articulation

could be dealt with and evaluative procedures could be developed so the state would have some "feel" for the job that is being done in its teacher education programs. The suggested areas for research would be jointly arrived at by both those engaged in teacher education and those engaged in teaching.

The council arrangement would enable the strengths of various institutions to be encouraged and in like manner those institutions that do not have real strengths should be discouraged from undertaking research for which they are not adequately staffed or equipped. The council should also work toward the elimination of unnecessary duplication in research efforts.

The "operations analysis" approach suggested in Chapter IV of the Task Force Report and the proposed model on page 47 for such research and development represent steps in the right direction and such analyses should become an important part of the first efforts of a newly developed Teacher Education Research Council.

Another of the initial responsibilities of the coordinated research programs suggested in Chapter IV of the Task Force report should be that of developing a more explicit and creative approach to curtailing the "teacher drain." Not only should stress be placed upon gaining increased numbers of teachers through better selection of candidates but also through creating more enticing conditions for service in the public schools. The report alludes to such needs, of course, but it does not develop procedures for such steps as fully as needs to be done through

additional research. In any event, it is desirable that the state provide more funds for research activities in teacher education, particularly to offset anticipated reductions in federal funding for such programs.

#### Junior College Staff Preparation

Obviously, one of the most serious problems confronting teacher education in Florida is that characterized in the report of the Task Force by the statement, "at the present time Florida is a debtor state in the production of teachers." This situation when applied to the production of instructional personnel for the junior and community colleges is extremely critical. The problem does not appear to be one that can be solved by the production of the usual research doctorates, for the junior and community colleges require individuals who are oriented toward instruction rather than research. Yet, the most effectively prepared teachers for this level of higher education will require a combination of preparation in education and the major discipline in which the person will be teaching. Master's degree and specialist degree programs must involve subject matter orientation along with knowledge of teaching methodology. At the present time it is encouraging to note that some of the institutions in Florida are experimenting with various approaches to the preparation of junior college teaching personnel; however, even more attention must be given to this area.

As is true with doctoral level work, it does not seem feasible, even with the tremendous shortage of personnel, for each of the nine state-assisted institutions to become engaged in programs of this type.

It seems logical to suggest that the following institutions be charged with the responsibility for developing programs for the preparation of junior college teaching personnel; University of Florida, Florida State University, the University of South Florida, Florida Atlantic University, and the University of West Florida. If it is impossible for these five institutions to provide a sufficient number of teachers for the junior colleges, then the new institutions at Jacksonville and Miami should embark as soon as possible on such programs. At this point, it would not seem desirable for Florida Technological University or Florida A and M University to be involved in these programs of preparation, although if creative and innovative programs should be forthcoming on these campuses, they could be given consideration for approval.

#### Other Problem Areas for Consideration

In the visits to the various institutions several other problems of some consequence were mentioned and it seems desirable to include them in this review statement even though they may be somewhat apart from the Task Force report itself.

One of the most basic problems in teacher education seems to stem from a feeling on the part of those engaged in the teacher education programs that insufficient attention is given in the internal institutional formulae for the distribution of funds to the needs of professional education programs. The point of view was expressed on virtually every campus that other colleges and divisions on the campuses receive a higher ratio of support than do the colleges of education. Certainly, if quality professional education is to be provided for the

State of Florida, there must be equity in the institutional distribution of funds.

Another similar problem, but one that stems from the state level of distributing funds, is that of funding continuing education activities. It appears from a cursory study of this area that the programs of continuing education are not adequately supported, particularly in teacher education, and if the Southern Association of Colleges and Schools or the National Council for Accreditation of Teacher Education should make a thorough study of this situation, it is probable that serious questions would be raised by these accrediting organizations. At the same time consideration is given to a different approach to funding continuing education, it would seem logical to study the question of whether too much dependence may now be placed on credit courses for updating teachers. It seems quite possible that other experiences should and could be provided by the colleges of education for the in-service education of teachers. To do so, however, in all probability, would necessitate a different formula approach for continuing education.

While discussing problems of financial support, it should be mentioned that more than one institution called attention to the stifling effect of internal institutional controls on the use of research grants. Comments would lead to the conclusion that such controls sometimes limit the effectiveness of carrying out the purposes for which the grants have been made and thereby bring the integrity of the institution into question with foundations or federal agencies.

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## Conclusion

In summarizing this review of the Task Force it seems appropriate to comment on the diversity of efforts in the area of teacher education. Each of the seven institutions now in operation employs a different approach to teacher education. From the point of view of the reviewer this is excellent. Not only does it speak well for the creativity of the institutions and the leadership within these universities, but it proves beyond a shadow of a doubt that the University System is not an inhibiting factor as some persons have implied, but rather is a stimulative and innovative agency in itself. One of the most heartening aspects to the program of teacher preparation in Florida is the dedication and commitment on the part of those engaged in the enterprise. Each institution is "sold" on its approach and yet the individuals in these different settings are constantly involved in developing new and improved methods of providing educational leadership for the state. Even though there are tremendous problems and challenges ahead for the State University System of Florida, it is quite evident that with the leadership and dedication present, these problems can be solved and Florida will continue to have one of the nation's outstanding teacher education programs.

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